

حمل الآن

مجاناً وحصرياً

المراجعة رقم (1)

الترم الاول



Final Revision Geometry Prep2

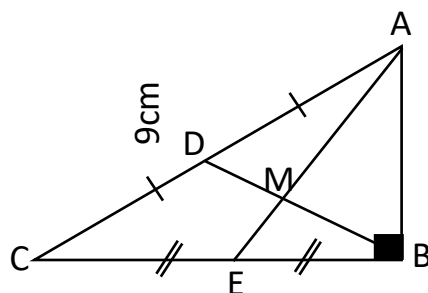
[1] Complete:

- 1) The length of the median drawn from the vertex of the right angle in the right - angled triangle the length of the hypotenuse
- 2) The number of axes of symmetry of the equilateral triangle is
- 3) The medians of the triangle intersect at
- 4) The sum of lengths of any two sides in any triangle the length of the third side
- 5) the measure of an angle of the isosceles triangle is 100 , then the measure of one of the other angles =.....
- 6) The axis of symmetry of the line segment is
- 7) The two base angles of the isosceles triangle are
- 8) The measure of the exterior angle of the equilateral triangle =
- 9) If the lengths of two sides in the triangle are not equal, then the greater side in length is opposite to.....
- 10) The sum of measure of any two consecutive angles in the parallelogram =...
- 11) The median of an isosceles triangle drawn from the vertex bisects and is perpendicular to
- 12) The isosceles triangle has axis of symmetry.
- 13) The length of the side opposite the angle of measure 30 in the right-angled triangle the length of the hypotenuse.
- 14) The longest side in the right-angled triangle is
- 15) ABC is a triangle in which $AB = AC$, $m(\angle A) = 50$, then $m(\angle B)$
- 16) ABC is a triangle in which $AB > BC > AC$, then the smallest angle in measure of it is
- 17) The point of intersection of the medians of any triangle divides each of them with the ratiofrom the base.
- 18) If the point A \in the axis of symmetry of BC , then AB =
- 19) ABC is a triangle in which $AB = 4$ cm , $BC = 5$ cm. then $AC \in]..... ,[$
- 20) If AD is a median in ABC , M is the point of intersection of the medians of it , then $AD = AM$
- 21) If the lengths of two sides in a triangle are not equal, then the greater side in length is opposite
- 22) The two base angles of the isosceles triangle are.....
- 23) If ABC is a right - angled at B and $AB = \frac{1}{2} AC$, then $m(\angle A)$
- 24) If the lengths of two sides in the isosceles triangles triangle are 5 cm and 10 cm , then the length of the third side = Cm.
- 25) Each two opposite angles in the parallelogram are.....
- 26) The triangle which has no axis of symmetry istriangle.
- 27) If AD is a median of ABC , M is the point of intersection of the median of ABC , then $AM = AD$

- 28) In the isosceles triangle if the measure of one of the two base angle 50 , then the measure of the vertex angle
- 29) The axis of symmetry of a line segment is the straight line which is
- 30) In $\triangle ABC$, if $m(\angle B) = 70$ and $m(\angle C) = 50$, then : AB AC
- 31) In the parallelogram , the two diagonals are
- 32) If x cm , 4 cm and 5 cm. are lengths of the sides of a triangle , then $... < x < ...$
- 33) The longest side in the right-angled triangle is
- 34) The bisector of the vertex angle of the isosceles triangle is
- 35) Any point on the axis of symmetry of a line segment is
- 36) The length of the side opposite the angle whose measure 30 in the right – angled triangle equals
- 37) If ABC has one axes of symmetry and $m(\angle ABC) = 120$, then $m(\angle A) =$
- 38) In ABC if $m(\angle A) = 30$ and $m(\angle B) = 90$, then $AC =$
(BC or $2 BC$ or $2 AB$ or BC)□
- 39) If ABC is right - angled at B , then AB AC
- 40) If 3 cm and 7 cm are two lengths of two sides in a triangle , then the greatest integer representing the length of the third side is Cm
- 41) The length of the median drawn from the vertex of the right angle of the right-angled triangle equals
- 42) The perpendicular bisector of a line segment is called
- 43) The point of intersection of the medians of the triangle bisects each of them with the ratio : From the base
- 44) If the lengths of two sides of a triangle are not equal, then the greater side in length is opposite
- 45) If the length of the median of a triangle drawn from a vertex is equal to the half length of the opposite side , then the angle of this vertex is
- 46) If the lengths of two sides of an isosceles triangle are
11 cm and 5 cm , then the length of the third side is.....
- 47) The number of axes of symmetry of the triangle in which the measure of two angles are 60 and 70 equals
- 48) The length of the hypotenuse of the right-angled triangle = the length of the median drawn from the vertex of the right angle.
- 49) In $\triangle ABC$ if $m(\angle B) - m(\angle A) > m(\angle C)$, then AC AB
- 50) If the lengths of two sides of a triangle are not equal , then the greater in length is opposite
- 51) The bisector of the vertex angle of the isosceles triangle
- 52) If the length of any side of a triangle $= \frac{1}{3}$ the perimeter of the triangle , then the number of axes of symmetry of the triangle is
- 53) If the lengths of two sides of a triangle are 5 cm and 7 cm , then the length of the third side] , [
- 54) In the parallelogram , the two diagonals
- 55) If ABC has one axis of symmetry and $m(\angle B) = 120$, then $m(\angle A)$

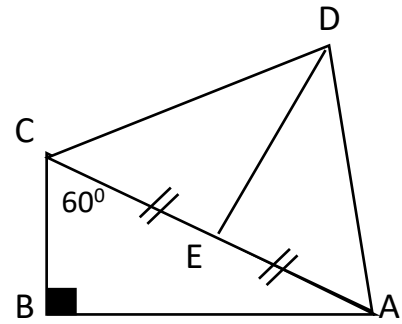
- 56) The point of the intersection of the medians of the triangle divides each of them with ratio from the vertex.
- 57) In $\triangle ABC$, $AB^2 + BC^2 - AC^2 > \dots\dots$
- 58) The bisector of the vertex angle of the isosceles triangle
- 59) If in $\triangle ABC$: $AB = AC$ and $m(\angle A) = 2 m(\angle B)$, then $m(\angle C)$
- 60) The isosceles triangle in which the measure of one of its angles is 60° , has axes of symmetry.
- 61) If the lengths of two sides of a triangle are not equal then the longer side is opposite an angle Than the measure of the angle opposite the other
- 62) An isosceles triangle , one of its base angles has measure 70° then the measure of the vertex angle is
- 63) An isosceles triangle the lengths of two sides of it are 4 cm and 9 cm then the length of the third side = cm.
- 64) In $\triangle XYZ$: $m(\angle Y) = 110^\circ$, then the longer side is
- 65) In $\triangle ABC$: $m(\angle A) = 55^\circ$, $m(\angle B) = 70^\circ$, then the number of axes of symmetry of the triangle is
- 66) the point of intersection of the medians of the triangle divides each of them with the ratio 1 : 2 from
- 67) The median which is drawn from the vertex of an isosceles triangle bisects and it is to the base.
- 68) $\triangle ABC$ is right - angled at B , $AB = 3$ cm , $BC = 4$ cm if BD is a median of $\triangle ABC$ then BD cm.
- 69) $\triangle ABC$ is right - angled at B then $AC \dots\dots BC$
- 70) If $\triangle ABC \cong \triangle XYZ$, then $AC = \dots\dots$
- 71) If the measure of one of the angles of an isosceles triangle is 60° then the triangle is
- 72) The bisector of the vertex angle of the isosceles triangle bisects the base and it is
- 73) If the measure of one angle of the two base angles of the isosceles triangle 75° , then the measure of the vertex angle
- 74) The measure of the exterior angle of the equilateral triangle =
- 75) If $\triangle ABC$ is an obtuse - angled triangle at C then $AB \dots\dots AC$
- 76) The perpendicular bisector of a line segment is called
- 77) In the parallelogram each two opposite sides are

1) $\triangle ABC$ is a triangle in which $m(\angle B) = 90^\circ$
 $m(\angle C) = 30^\circ$, $AC = 9$ cm
 \overline{AE} , \overline{BD} are two medians
 Intersecting at M, find the length
 Of \overline{BD} , \overline{BM} , \overline{AB}



2) ABC is a right angled Δ at B,
 $m(\angle ACB) = 60^\circ$, E is midpoint
of \overline{AC} and $DE = BC$

Prove that: $m(\angle ADC) = 90^\circ$



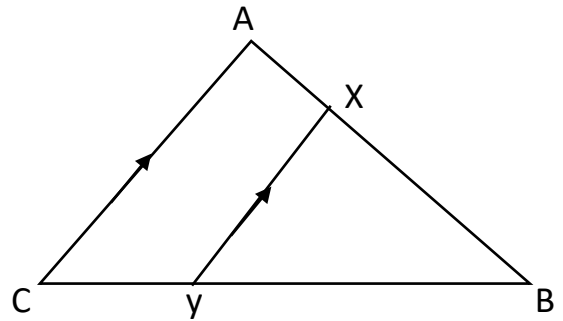
3) In the opposite figure:

$AB = BC$, $X \in \overline{AB}$ and $Y \in \overline{BC}$

Such that: $\overline{XY} \parallel \overline{AC}$

Prove that:

$m(\angle BXY) = m(\angle BYX)$

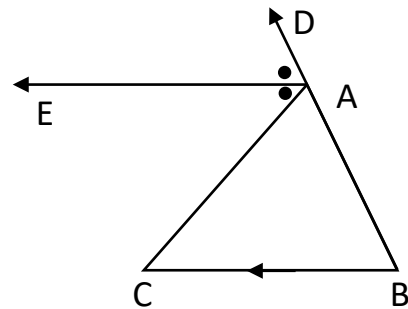


4) In the opposite figure:

$A \in \overrightarrow{BD}$, $\overrightarrow{AE} \parallel \overrightarrow{BC}$

and \overrightarrow{AE} bisects $\angle CAD$

Prove that: $AB = AC$

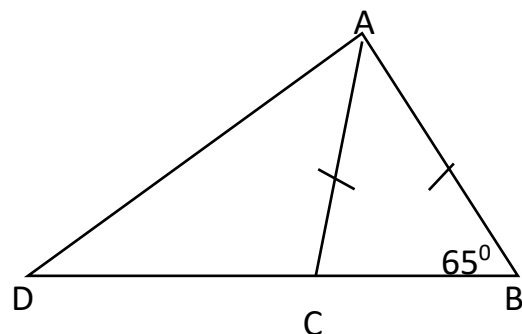


5) In the opposite figure:

$AB = AC = CD$ and $m(\angle B) = 65^\circ$

Find by proof:

$m(\angle BAD)$

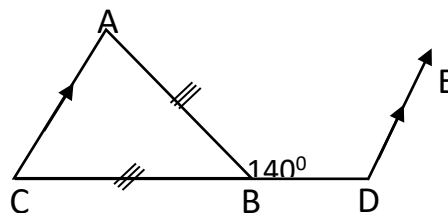


6) In the opposite figure:

$\overrightarrow{DE} \parallel \overrightarrow{AC}$, $AB = BC$

and $m(\angle ABD) = 140^\circ$

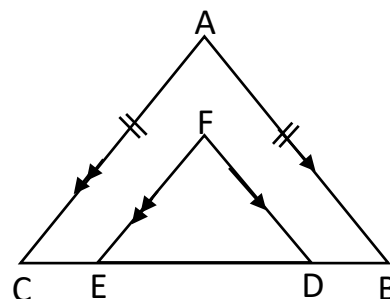
find $m(\angle EDB)$



7) $D \in \overline{BC}$, $E \in \overline{BC}$, $\overline{AB} \parallel \overline{FD}$ and

$\overline{AC} \parallel \overline{FE}$ if $AB = AC$

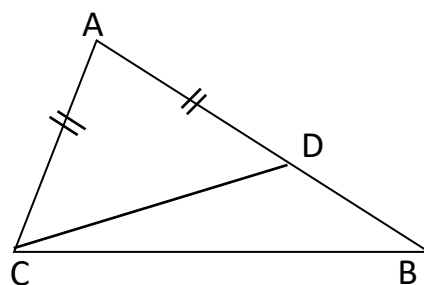
Prove that: FDE is an isosceles triangle.



8) In the opposite figure:

$D \in \overline{AB}$ where $AD = AC$

Prove that: $m(\angle ACB) > m(\angle B)$

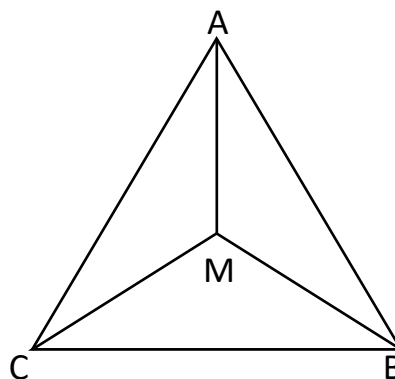


9) In the opposite figure:

ABC is a triangle in which M is

A point inside it, **prove that:**

$m(\angle AMC) > m(\angle ABC)$

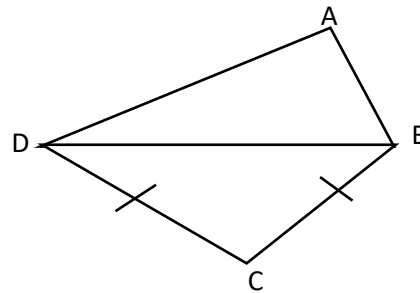


10) **In the opposite figure:**

$ABCD$ is a quadrilateral in which

$AD > AB$ and $BC = CD$

Prove that: $m(\angle ABC) > m(\angle ADC)$



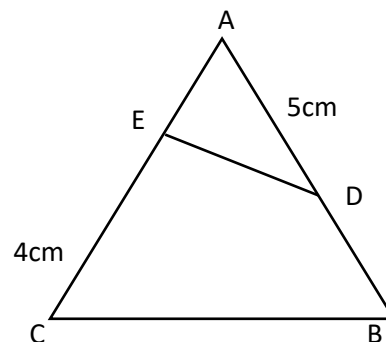
11) **In the opposite figure:**

ABC is a triangle in which

$AB = AC$ and $DB > DC$

Prove that:

$m(\angle ABD) > m(\angle ACD)$

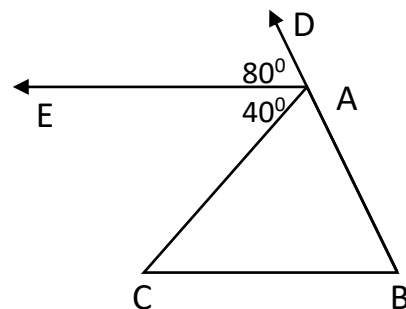


12) **In the opposite figure:**

$\overrightarrow{AE} \parallel \overrightarrow{BC}$, $m(\angle DAE) = 80^\circ$

and $m(\angle EAC) = 40^\circ$

Prove that: $AC > AB$

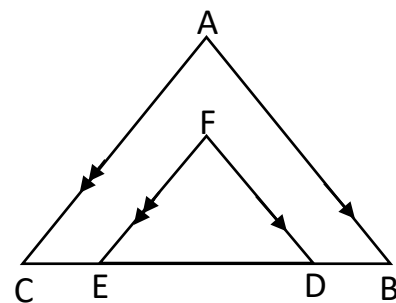


13) **In the opposite figure:**

$\overline{AB} \parallel \overline{DF}$, $\overline{AC} \parallel \overline{EF}$

$AC > AB$

Prove that: $FE > DF$

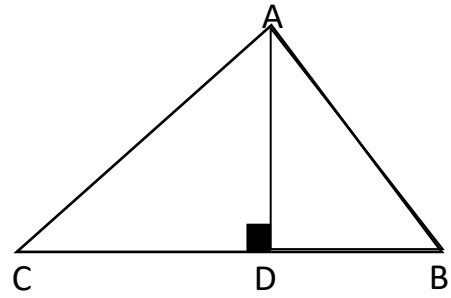


14) **In the opposite figure:**

ABC is a triangle in which

$AC > AB$, $\overline{AD} \perp \overline{BC}$

Prove that: $m(\angle BAD) < m(\angle CAD)$

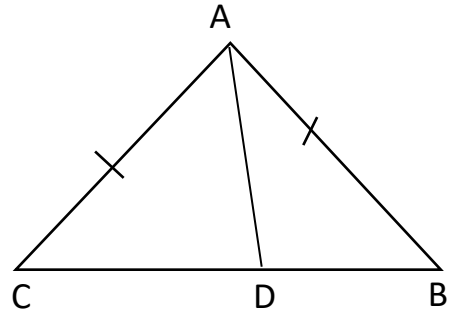


15) **In the opposite figure:**

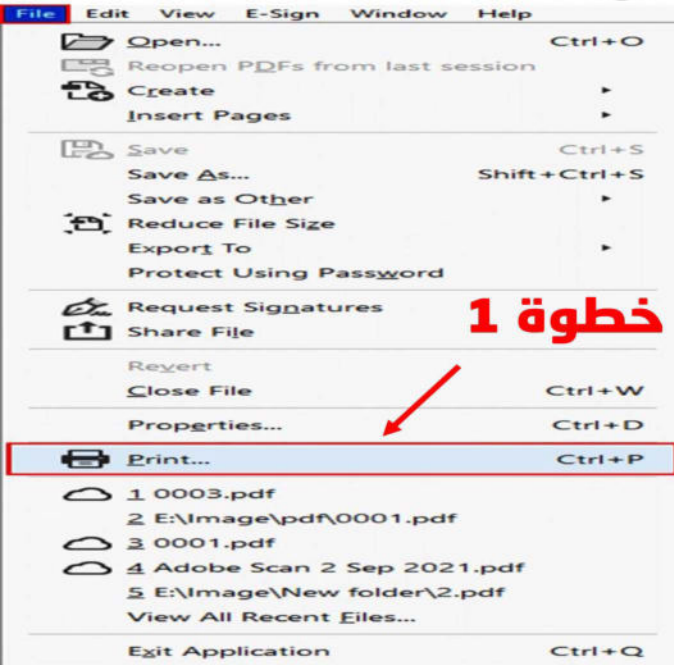
ABC is a triangle in which

$AB = AC$, $D \in \overline{BC}$

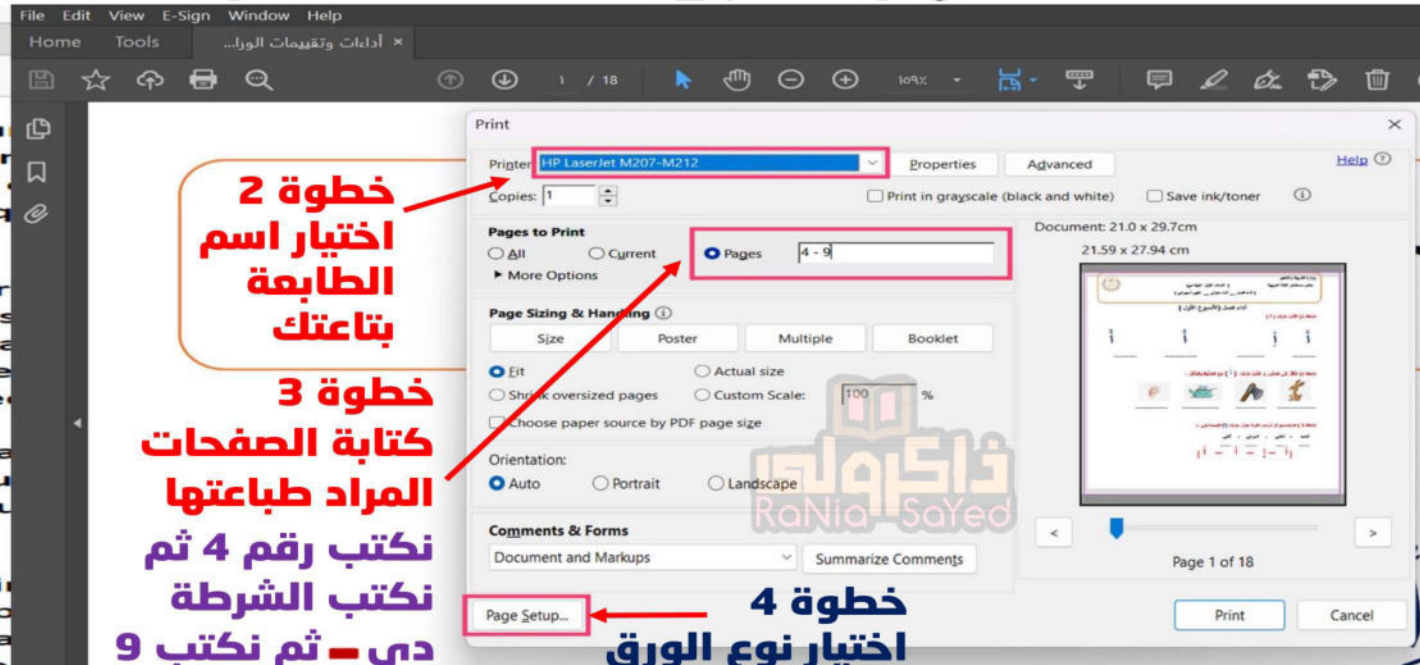
Prove that: $AB > AD$



كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



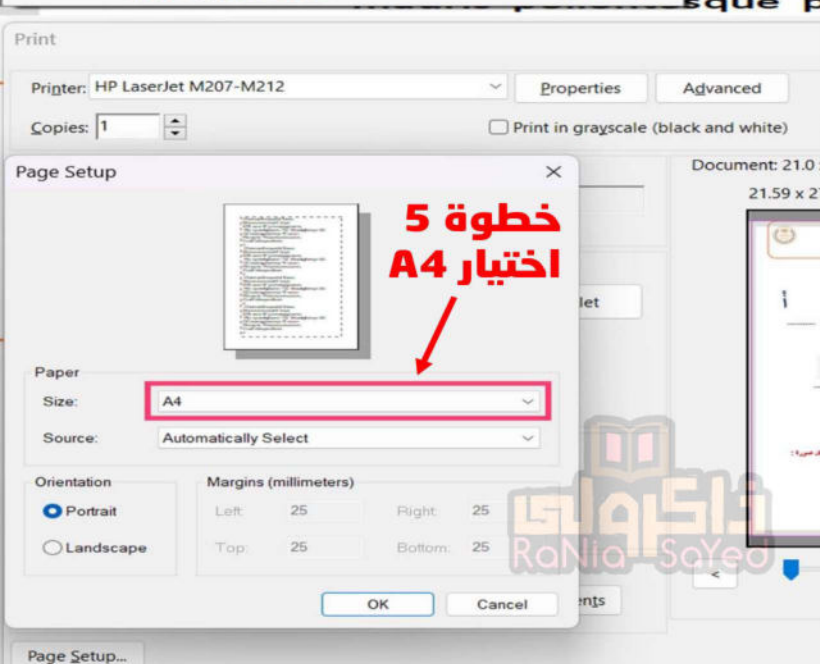
خطوة 1



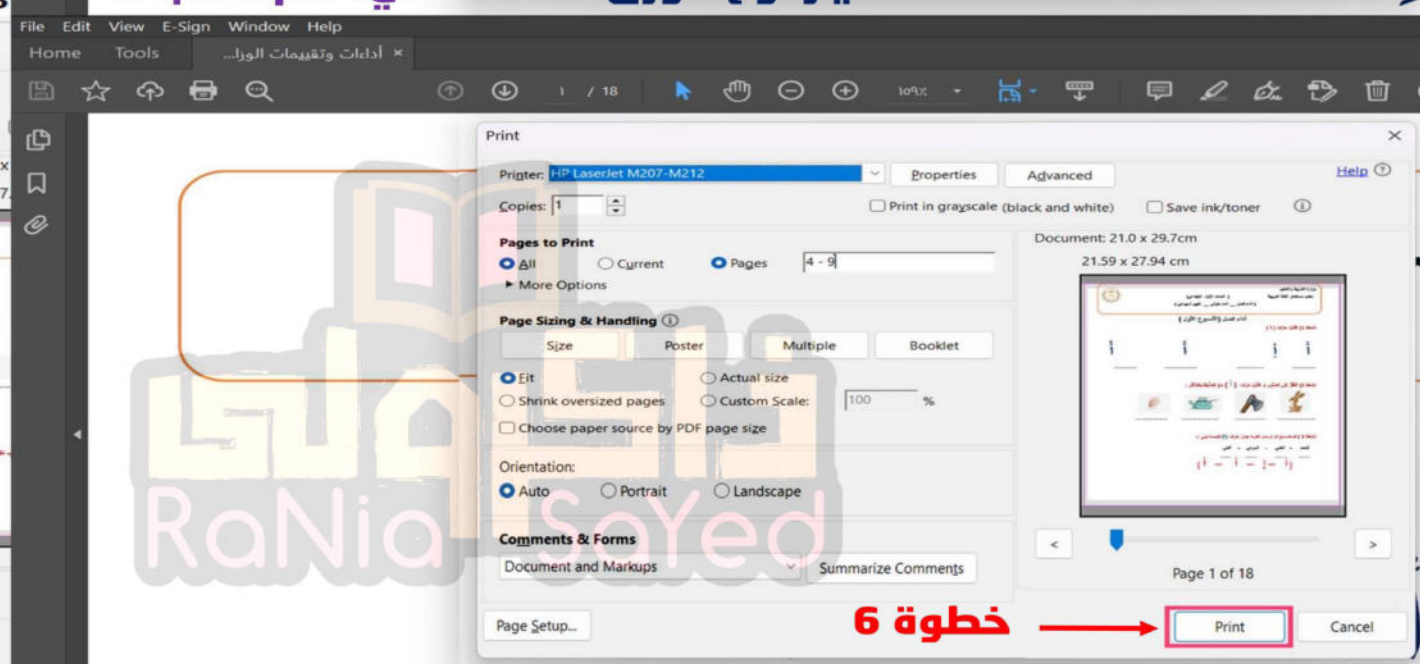
خطوة 2
اختيار اسم
الطابعة
بتاعتك

خطوة 3
كتابة الصفحات
المراد طباعتها
نكتب رقم 4 ثم
نكتب الشرطة
دي - ثم نكتب 9

خطوة 4
اختيار نوع الورق



خطوة 5
اختيار A4



خطوة 6

حمل الآن

مجاناً وحصرياً

المراجعة رقم (2)

الترم الاول





1	<p>1 Choose the correct answer from the given ones :</p> <p>In $\triangle XYZ$, if $XY > ZX$, then $m(\angle Y)$ $m(\angle Z)$</p> <p>(a) $>$ (b) $<$ (c) $=$ (d) \equiv</p>
2	<p>The measure of the exterior angle of an equilateral triangle equals</p> <p>(a) 30° (b) 60° (c) 120° (d) 90°</p>
3	<p>The lengths 9 cm. , 4 cm. and may be the side lengths of an isosceles triangle.</p> <p>(a) 9 cm. (b) 13 cm. (c) 5 cm. (d) 4 cm.</p>
4	<p>\overline{AD} is a median of $\triangle ABC$, and M is the point of concurrence of the medians , then $AM =$ AD</p> <p>(a) $\frac{2}{3}$ (b) $\frac{1}{2}$ (c) $\frac{3}{2}$ (d) 2</p>
5	<p>$\triangle XYZ$ is an isosceles triangle in which $m(\angle X) = 100^\circ$, then $m(\angle Y) =$</p> <p>(a) 100° (b) 80° (c) 60° (d) 40°</p>
6	<p>The lengths which can be lengths of sides of a triangle are</p> <p>(a) (0 , 3 , 5) (b) (3 , 3 , 5) (c) (3 , 3 , 6) (d) (3 , 3 , 7)</p>
7	<p>In $\triangle ABC$, if $m(\angle B) = 130^\circ$, then the longest side of it is</p> <p>(a) \overline{BC} (b) \overline{AC} (c) \overline{AB} (d) its median.</p>
8	<p>In $\triangle ABC$ which is right-angled at B , if $AC = 20$ cm. , then the length of the median drawn from B equals</p> <p>(a) 10 cm. (b) 8 cm. (c) 6 cm. (d) 5 cm.</p>
9	<p>The point of concurrence of the medians of the triangle divides each median in the ratio of from the base.</p> <p>(a) 1 : 2 (b) 1 : 3 (c) 2 : 1 (d) 3 : 1</p>

10 If ΔABC is right-angled at B , $AB = 6$ cm. , $BC = 8$ cm. , then the length of the median drawn from B equals cm.

- (a) 10 (b) 8 (c) 6 (d) 5

11 The measure of one of the base angles in the isosceles triangle is 65° , then the measure of its vertex angle equals $^\circ$

- (a) 65 (b) 50 (c) 130 (d) 55

12 In ΔABC , if $AB = 3$ cm. , $BC = 5$ cm. , then $AC \in$

- (a) $]2, 8[$ (b) $]2, 7[$ (c) $]2, 15[$ (d) $]8, 15[$

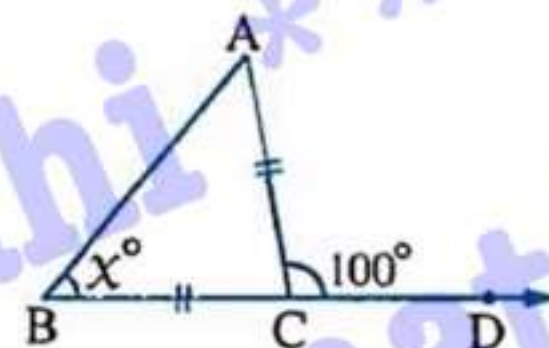
13 In the opposite figure :

$CA = CB$, $m(\angle B) = x^\circ$

, $m(\angle ACD) = 100^\circ$ where $C \in \overline{BD}$

, then $x =$

- (a) 50° (b) 100° (c) 150° (d) 200°



14 XYZ is a triangle in which $m(\angle Z) = 70^\circ$ and $m(\angle Y) = 60^\circ$, then YZ XY

- (a) $>$ (b) $<$ (c) $=$ (d) twice

15 The triangle which has three axes of symmetry is

- (a) scalene. (b) isosceles. (c) right-angled. (d) equilateral.

16 The base angles of the isosceles triangle are

- (a) alternate (b) corresponding (c) congruent (d) supplementary

17 In ΔABC , if $m(\angle A) = 100^\circ$ and $AB = AC$, then $m(\angle ABC) =$

- (a) 80° (b) 60° (c) 40° (d) 30°

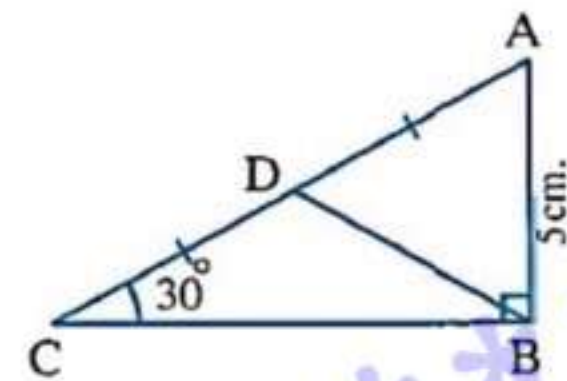
18 The numbers 4 , $x + 4$, 8 can be lengths of sides of an isosceles triangle if $x =$

- (a) 4 (b) 0 (c) 3 (d) 8

19 The sum of lengths of any two sides of a triangle the length of the third side.
 (a) < (b) > (c) = (d) \equiv

20 The number of symmetry axes of the isosceles triangle is
 (a) 1 (b) 2 (c) 3 (d) 4

21 In the opposite figure :
 $AD = DC$, $m(\angle C) = 30^\circ$, $m(\angle ABC) = 90^\circ$
 , $AB = 5$ cm. , then the perimeter of $\triangle ABD =$ cm.
 (a) 5 (b) 15
 (c) 20 (d) 25



22 The number of axes of symmetry of the equilateral triangle equals
 (a) zero (b) 1 (c) 2 (d) 3

23 In $\triangle ABC$, $AB = 4$ cm. , $BC = 6$ cm. , then $AC \in$
 (a) $]2, 4[$ (b) $[2, 10]$ (c) $]2, 10[$ (d) $[0, 10]$

24 If M is the point of concurrence of the medians of $\triangle ABC$, \overline{AD} is a median
 , then $MA =$
 (a) $2 AD$ (b) $\frac{2}{3} AD$ (c) $\frac{3}{2} AD$ (d) $\frac{1}{2} MD$

25 In $\triangle ABC$, $m(\angle A) = 60^\circ$, $m(\angle C) = 45^\circ$, then
 (a) $AB < AC$ (b) $AB = AC$ (c) $AB > AC$ (d) $AB = BC$

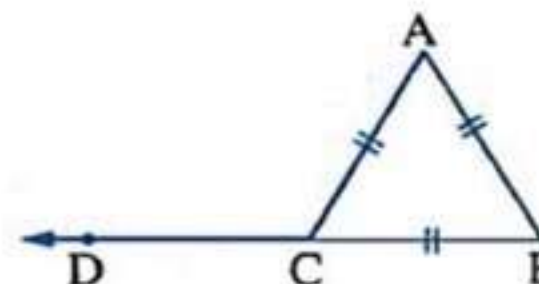
26 The length of the side opposite to the angle of measure 30° in the right-angled triangle equals the length of the hypotenuse.
 (a) $\frac{1}{2}$ (b) $\frac{2}{3}$ (c) $\frac{1}{4}$ (d) 2

100



- 27 ABC is an equilateral triangle , then $m(\angle A) = \dots\dots\dots^\circ$
 (a) 45 (b) 60 (c) 120 (d) 35
- 28 The numbers which can not be side lengths of a triangle are
 (a) 3 , 3 , 3 (b) 3 , 3 , 4 (c) 3 , 3 , 5 (d) 3 , 3 , 6

- 29 In the opposite figure :
 ΔABC is equilateral , then $m(\angle ACD) = \dots\dots\dots$
 (a) 45° (b) 60°
 (c) 120° (d) 135°



- 30 In ΔABC which is right-angled at B , if $AC = 20$ cm. , then the length of the median of the triangle drawn from B equals
 (a) 10 cm. (b) 8 cm. (c) 6 cm. (d) 5 cm.

- 31 The sum of lengths of two sides in a triangle is the length of the third side.
 (a) greater than (b) smaller than (c) equals to (d) twice

- 32 If the lengths of two sides in an isosceles triangle are 8 cm. and 4 cm. , then the length of the third side is cm.
 (a) 4 (b) 8 (c) 3 (d) 12

- 33 If the measure of the vertex angle of an isosceles triangle is 80° , then the measure of one of the base angles equals
 (a) 60° (b) 40° (c) 30° (d) 50°

- 34 The point of intersection of the medians of the triangle divides each of them in the ratio of from the vertex.
 (a) 1 : 2 (b) 1 : 3 (c) 2 : 1 (d) 2 : 3

- 35 In ΔABC , if $AC = 4$ cm. , $BC = 3$ cm. , then $m(\angle B) \dots\dots\dots m(\angle A)$
 (a) $>$ (b) $<$ (c) $=$ (d) \leq

100

36

2

Complete :

In the right-angled triangle , the length of the median drawn from the vertex of the right angle equals

37

The median of the isosceles triangle from the vertex angle ,

38

The longest side in the right-angled triangle is

39

In $\triangle ABC$, if $m(\angle A) = 30^\circ$ and $m(\angle B) = 90^\circ$, then $BC = \dots\dots\dots AC$

40

If the measure of an angle in a right-angled triangle is 45° , then the triangle is

41

The bisector of the vertex angle of the isosceles triangle ,

42

$\triangle ABC$ is right-angled at B , $m(\angle A) = 30^\circ$, $AC = 10$ cm. , then $CB = \dots\dots\dots$ cm.

43

If \overline{AD} is a median in $\triangle ABC$, and M is the point of intersection of its medians and $AM = 12$ cm. , then $AD = \dots\dots\dots$

44

The medians of the triangle are

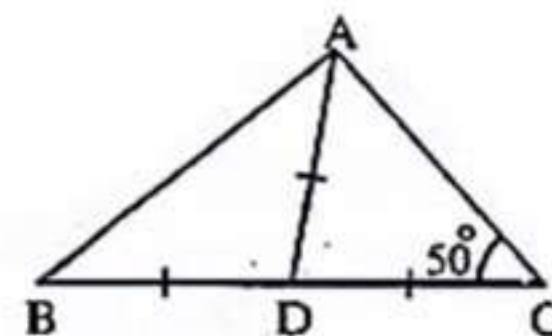
45

In the opposite figure :

$$AD = DC = BD$$

$$, m(\angle C) = 50^\circ$$

$$, \text{ then } m(\angle B) = \dots\dots\dots^\circ$$



46

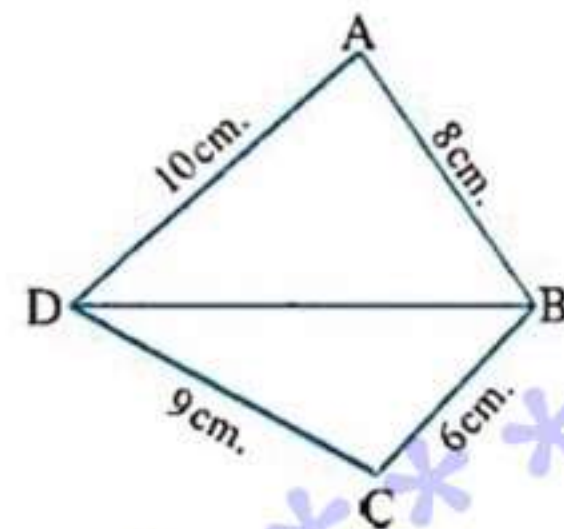
The perpendicular bisector of a line segment is called



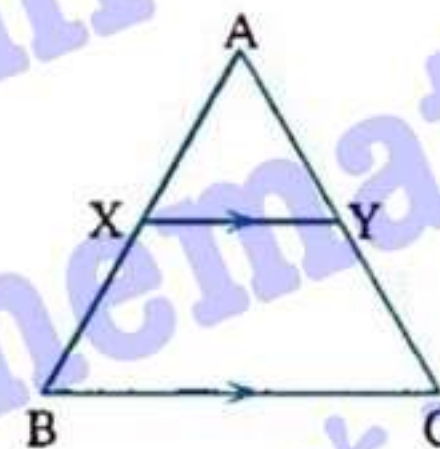
47 Any point on the axis of symmetry of a line segment is from its terminals.

48 The straight line passing through the vertex angle of the isosceles triangle perpendicular to its base

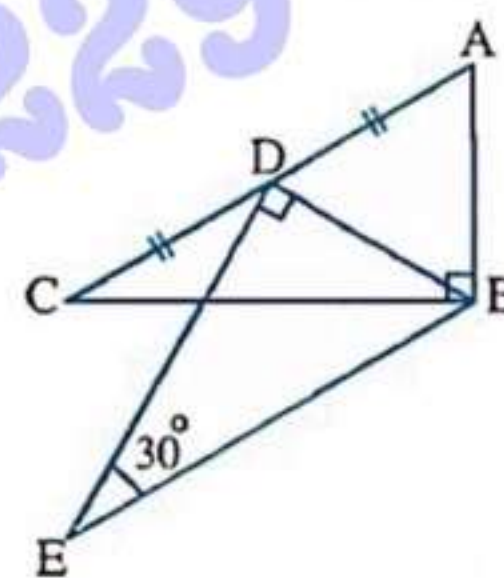
49 In the opposite figure :
 ABCD is a quadrilateral in which $AB = 8 \text{ cm}$,
 $BC = 6 \text{ cm}$, $CD = 9 \text{ cm}$,
 and $DA = 10 \text{ cm}$.
 Prove that : $m(\angle ABC) > m(\angle ADC)$



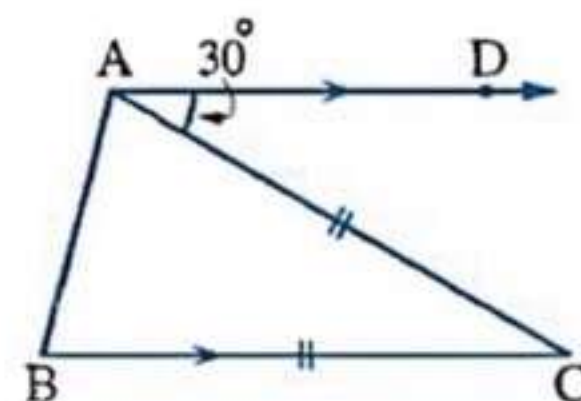
50 In the opposite figure :
 ABC is a triangle in which $AB = AC$
 $\overline{XY} \parallel \overline{BC}$
 Prove that :
 $\triangle AXY$ is an isosceles triangle.



51 In the opposite figure :
 $m(\angle ABC) = m(\angle BDE) = 90^\circ$
 $m(\angle E) = 30^\circ$
 D is the midpoint of \overline{AC}
 Prove that : $AC = BE$



52 In the opposite figure :
 ABC is a triangle in which $AC = BC$
 $\overline{AD} \parallel \overline{BC}$, $m(\angle DAC) = 30^\circ$
 Find with proof :
 The measures of the angles of $\triangle ABC$

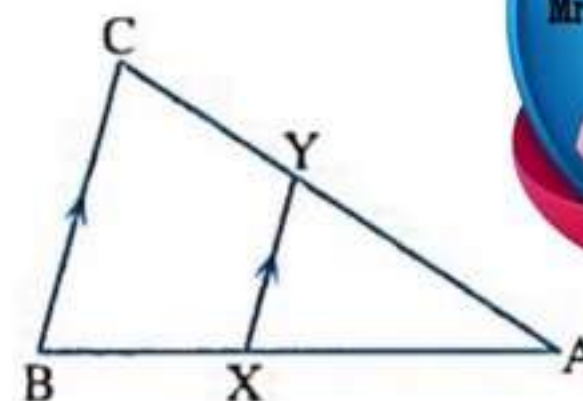


53

In the opposite figure :

$AB > BC$, $\overline{XY} \parallel \overline{BC}$

Prove that : $AX > XY$



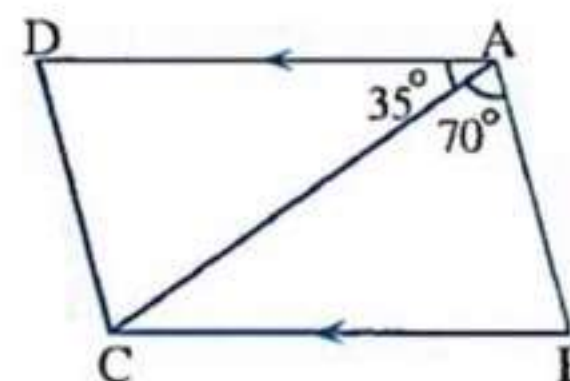
54

In the opposite figure :

$\overline{AD} \parallel \overline{BC}$, $m(\angle BAC) = 70^\circ$

and $m(\angle DAC) = 35^\circ$

Prove that : $AC > BC$

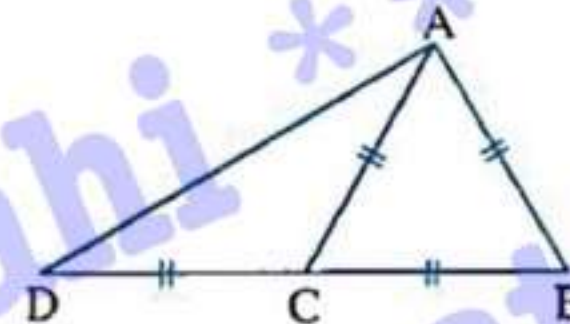


55

In the opposite figure :

$AB = BC = AC = DC$

Prove that : $m(\angle BAD) = 90^\circ$



56

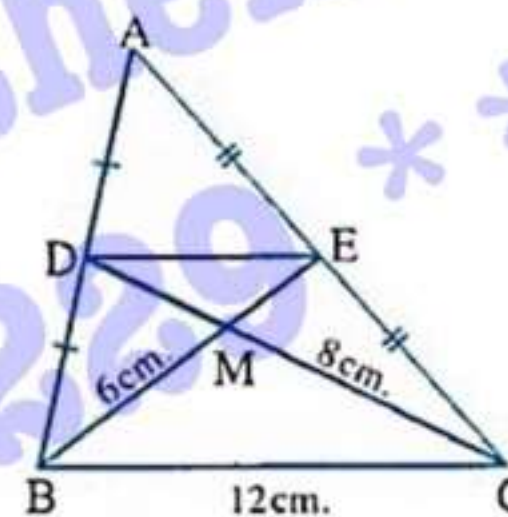
In the opposite figure :

\overline{BE} , \overline{CD} are medians in $\triangle ABC$

, $MB = 6 \text{ cm.}$, $MC = 8 \text{ cm.}$

, $BC = 12 \text{ cm.}$

Find : The perimeter of $\triangle MDE$



57

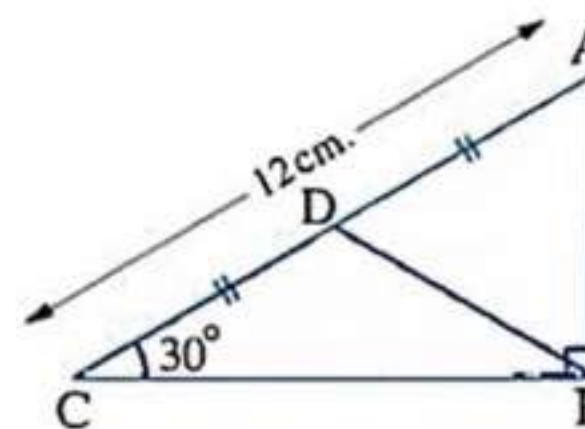
In the opposite figure :

$\triangle ABC$ is a triangle , $m(\angle ABC) = 90^\circ$

, D is the midpoint of \overline{AC}

, $AC = 12 \text{ cm.}$, $m(\angle C) = 30^\circ$

, then find : The perimeter of $\triangle ABD$



58

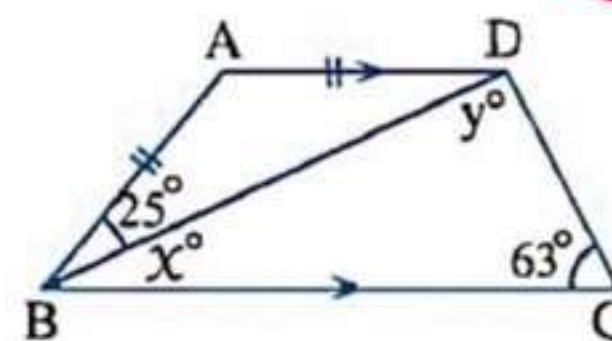
In the opposite figure :

$$\overline{AD} \parallel \overline{BC}, AD = AB$$

$$, m(\angle ABD) = 25^\circ, m(\angle C) = 63^\circ$$

$$, m(\angle DBC) = x^\circ, m(\angle CDB) = y^\circ$$

Find the value of each of : x and y



59

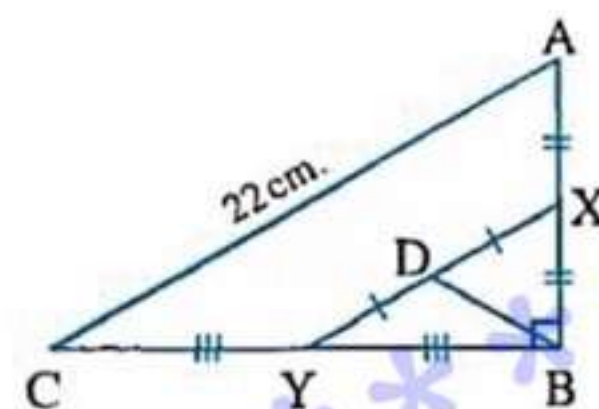
In the opposite figure :

$$m(\angle ABC) = 90^\circ, X, Y, D$$

are the midpoints of $\overline{AB}, \overline{BC}, \overline{XY}$

respectively, if $AC = 22$ cm.

find : BD



60

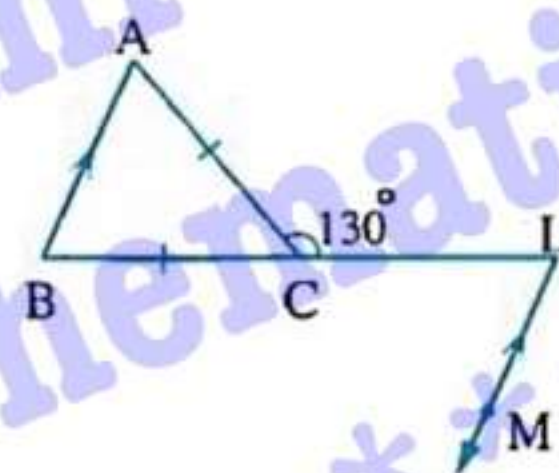
In the opposite figure :

$$C \in \overleftrightarrow{LB}, AC = BC$$

$$, m(\angle LCA) = 130^\circ$$

$$, \overleftrightarrow{LM} \parallel \overleftrightarrow{AB}$$

Find : $m(\angle MLC)$



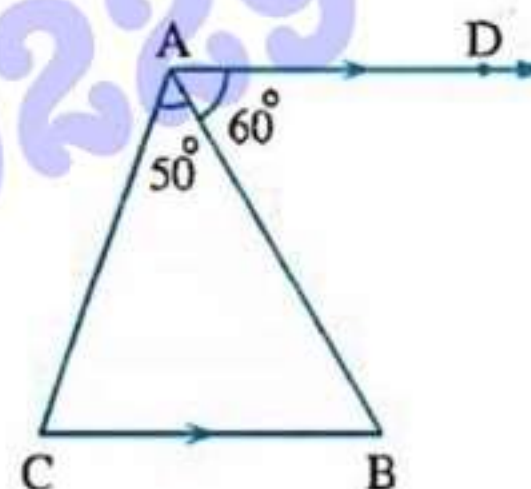
61

In the opposite figure :

ABC is a triangle, $\overline{AD} \parallel \overline{CB}$

$$, m(\angle DAB) = 60^\circ, m(\angle BAC) = 50^\circ$$

Prove that : $AB > AC$



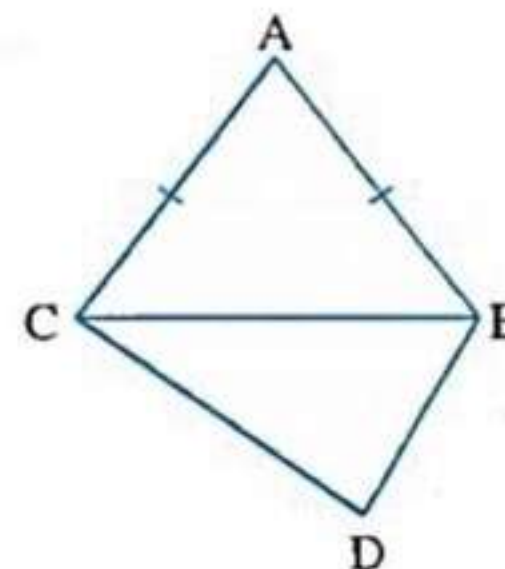
62

In the opposite figure :

$$AB = AC, DC > DB$$

Prove that :

$$m(\angle ABD) > m(\angle ACD)$$



63

In the opposite figure :

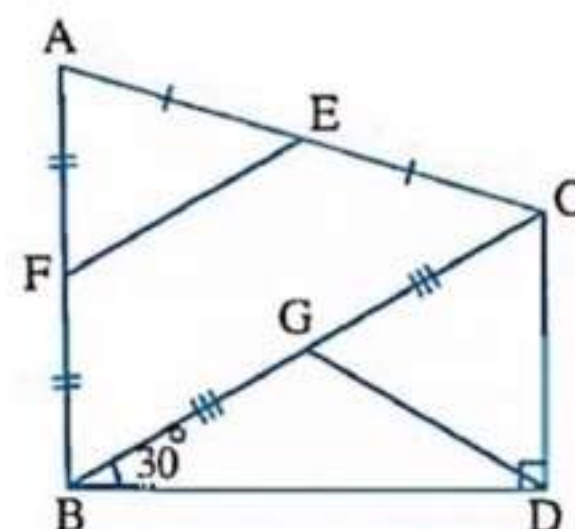
F, E, G are the midpoints of \overline{AB} , \overline{AC} , \overline{BC}

, $m(\angle BDC) = 90^\circ$, $m(\angle CBD) = 30^\circ$

, $BC = 10$ cm.

1 Prove that : $FE = DC = GD$

2 Find : The perimeter of $\triangle GCD$



64

ABC is a triangle in which $m(\angle A) = 40^\circ$, $m(\angle B) = 80^\circ$ Arrange the lengths of the sides of the triangle descendingly.

65

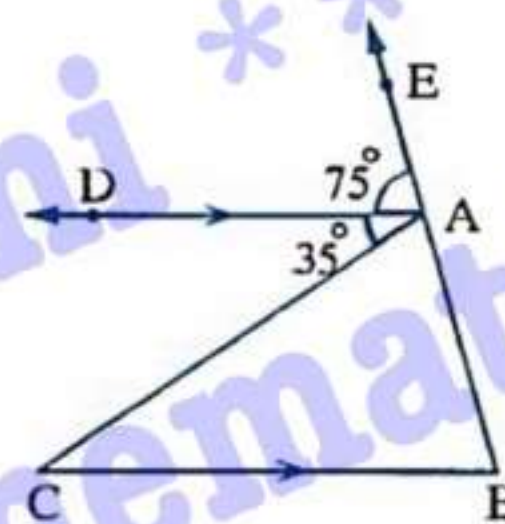
In the opposite figure :

$E \in \overrightarrow{BA}$, $\overrightarrow{AD} \parallel \overrightarrow{BC}$

, $m(\angle DAE) = 75^\circ$

, $m(\angle DAC) = 35^\circ$

Prove that : $BC > AB$



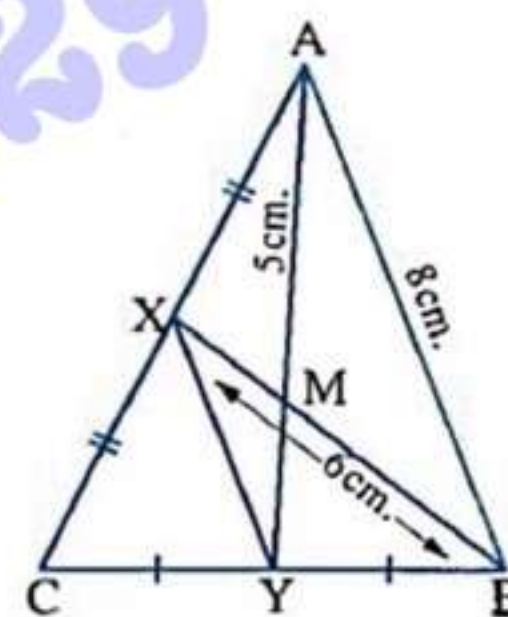
66

In the opposite figure :

X is the midpoint of \overline{AC} , $AB = 8$ cm.

, Y is the midpoint of \overline{BC} , $AM = 5$ cm., $BX = 6$ cm.

Find : The perimeter of $\triangle XMY$



67

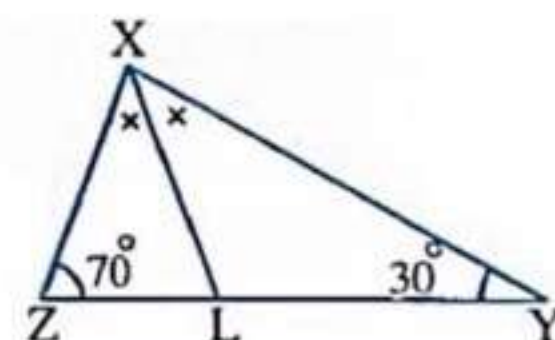
In the opposite figure :

\overrightarrow{XL} bisects $\angle YXZ$, $m(\angle Y) = 30^\circ$

, $m(\angle Z) = 70^\circ$

1 Find : $m(\angle LXZ)$ and $m(\angle XLZ)$

2 Prove that : $\triangle XLZ$ is an isosceles triangle.



68

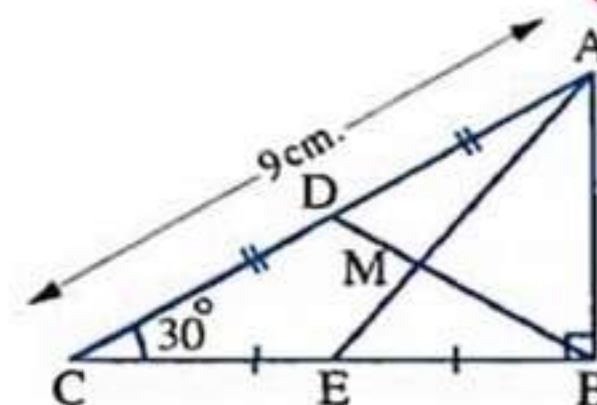
In the opposite figure :

$\triangle ABC$ is a right-angled triangle at B

, $m(\angle C) = 30^\circ$, D is the midpoint of \overline{AC}

, E is the midpoint of \overline{BC} , $AC = 9$ cm.

Find the length of each of : \overline{BD} , \overline{BM} , \overline{AB} , \overline{MD}



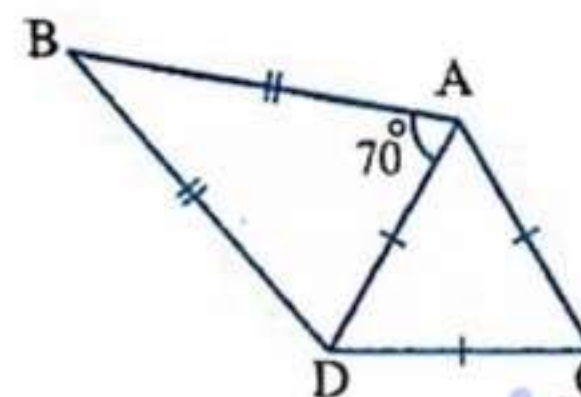
69

In the opposite figure :

$AB = BD$, $m(\angle BAD) = 70^\circ$

, $\triangle ADC$ is equilateral

Find : $m(\angle BDC)$



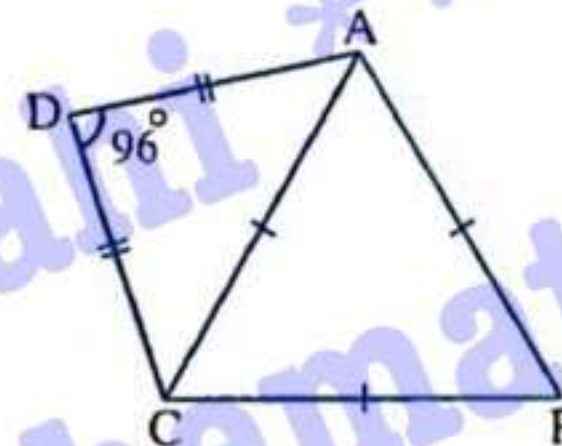
70

In the opposite figure :

$\triangle ABC$ is equilateral, $DA = DC$

, $m(\angle ADC) = 96^\circ$

Find : $m(\angle DAB)$



71

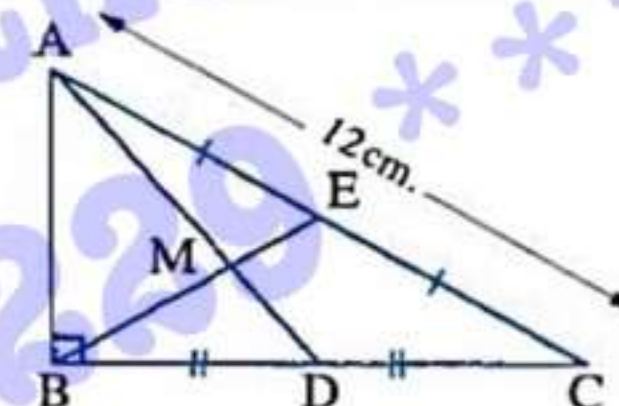
In the opposite figure :

$\triangle ABC$ is right-angled at B

, E and D are the midpoints of \overline{AC} and \overline{BC} respectively

, $AC = 12$ cm.

Find the length of each of : \overline{BE} and \overline{ME}



72

In $\triangle ABC$: $AB = 7$ cm., $BC = 5$ cm. and $AC = 6$ cm.

Arrange its angles ascendingly due to their measures.

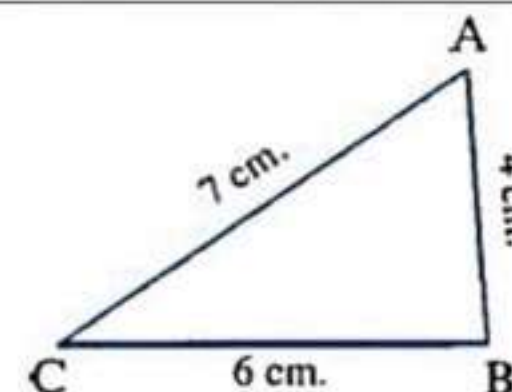
73

In the opposite figure :

Arrange the angles

of $\triangle ABC$ descendingly

due to their measures



حمل الآن

مجاناً وحصرياً

المراجعة رقم (3)

الترم الاول



SECOND: GEOMETRY

Complete:

(1)	If 4 cm and 6 cm are two side lengths of an isosceles triangle, then the length of the 3 rd side is cm	"8"
(2)	The measure of the exterior angle of the equilateral triangle is°	"120"
(3)	In $\triangle ABC$ if $m(\angle B) > m(\angle C)$, then AC AB	">"
(4)	If two angles of a triangle are congruent, then the two sides opposite to these two angles are and the triangle is an	"congruent" "isosceles"
(5)	The longest side in the right-angled triangle is the	"hypotenuse"
(6)	The bisector of the vertex angle of the isosceles triangle the base and to it.	"bisect" "perpendicular"
(7)	The isosceles triangle has axes of symmetry.	"1"
(8)	The equilateral triangle has ... axes of symmetry.	"3"
(9)	The scalene triangle has axes of symmetry.	"0"
(10)	Triangle of side lengths 4 cm and 9 cm has one axis of symmetry, then the length of the 3 rd side is cm	"9"
(11)	The median of the isosceles triangle drawn from its vertex the vertex angle and to the base.	"bisect" "perpendicular"
(12)	If $C \in$ the axis of \overleftrightarrow{AB} , then =	"AC=BC"
(13)	In a triangle, if two sides have unequal lengths, then the longer is opposite to the angle of the	"greater measure"

(14)	In a triangle, if two angles are unequal in measure, then the greater angle in measure is opposite to the side of the	"greater length"
(15)	In $\triangle ABC$, if $m(\angle A)=120^\circ$, then the longest side is	"BC"
(16)	In $\triangle ABC$, if $m(\angle C)=70^\circ$ and $m(\angle B)=60^\circ$, then AB AC	">"
(17)	ABC is an isosceles triangle, $m(\angle A)=100^\circ$, then $m(\angle B)=$ $^\circ$	"40"
(18)	ABC is an isosceles triangle, $m(\angle A)=60^\circ$ and its perimeter is 15 cm, then $AB=$ cm.	"5"
(19)	If the measure of an angle of the isosceles triangle is 60° , then it's called	"equilateral"
(20)	The perpendicular bisector of a line segment is called	"axis of symmetry"
(21)	Of the lengths of two sides in a triangle are 2 cm and 7 cm, then the length of the third side is $\in]$, [$$	"[5,9["
(22)	Any point lies on the axis of a line segment is at from its terminals.	"equal distances"
(23)	The length of any side in a triangle is the sum of the lengths of the two other sides.	"less than"
(24)	If ABC is a right-angled triangle at B, then the longest side is	"AC"
(25)	The triangle which has two angles of measures 45° and 65° has axes of symmetry.	"0"
(26)	In $\triangle ABC$, if $AB=AC$ and $m(\angle A)=70^\circ$, then $m(\angle B)=$ $^\circ$	"55"
(27)	In $\triangle ABC$, $AB + BC - AC >$	"0"
(28)	In $\triangle ABC$, if $AB > AC$, then $m(\angle C)$ $m(\angle B)$	">"
(29)	The base angles of the isosceles triangle are	"congruent"

(30)	In the isosceles right-angles triangle, the measure of any angle of its base is°	"45"
(31)	If $x, 7, 4$ are lengths of sides of a triangle, then $< x <$	" $3 < x < 11$ "
(32)	If the measure of an angle in a right-angled triangle is 45° , then the triangle is	"an isosceles"
(33)	The numbers $3, 6, \dots$ can be the lengths of sides of an isosceles triangle.	"6"
(34)	The triangle whose side's lengths are 2 cm, 5 cm and $(x+3)$ cm, is an isosceles if $x = \dots$	"2"

Choose the correct answer

- (1) The medians of the triangle intersect at point.
 a 1 b 2 c 3 d 4
- (2) The right angled-triangle has medians.
 a 0 b 1 c 2 d 3
- (3) The point of intersection of medians in the triangle divides each of them in the ration from the vertex.
 a 1:3 b 3:1 c 2:1 d 1:2
- (4) The point of intersection of medians in the triangle divides each of them in the ration from the base.
 a 1:3 b 3:1 c 2:1 d 1:2
- (5) If \overline{AD} is a median in $\triangle ABC$, M is the point of intersection of the medians, then $AM = \dots AD$
 a $\frac{1}{3}$ b $\frac{2}{3}$ c $\frac{1}{2}$ d $\frac{1}{4}$

- (6) If \overline{AD} is a median in $\triangle ABC$, M is the point of intersection of the medians, then $AM = \dots MD$
- a 2 b $\frac{1}{2}$ c 3 d $\frac{1}{3}$
- (7) The length of the median drawn from the vertex of the right angle in the right-angled triangle = the length of the hypotenuse.
- a 2 b $\frac{1}{3}$ c $\frac{1}{2}$ d 3
- (8) The length of the hypotenuse of the right-angled triangle = the length of the median which drawn from the vertex of the right angle. —
- a half b twice c third d quarter
- (9) If $\triangle ABC$ is a right-angled at B, $AB=6$ cm and $BC=8$ cm, then the length of the median drawn from B = cm
- a 10 b 4 c 5 d 3
- (10) If $\triangle ABC$ is a right-angled at B, $AC=20$ cm, then the length of the median drawn from B = cm
- a 10 b 8 c 6 d 5
- (11) In $\triangle ABC$, $m(\angle B)=90^\circ$, $AC=12$ cm and \overline{BD} is a median, then $BD = \dots cm$
- a 12 b 6 c 24 d 10
- (12) The length of the side opposite to the angle of measure 30° in the right-angle triangle the length of the hypotenuse.
- a twice b half c square d equal
- (13) In $\triangle ABC$, $m(\angle B)=90^\circ$ and $m(\angle A)=30^\circ$, then $BC= \dots$
- a $\frac{1}{2} AB$ b $\frac{1}{2} AC$ c $2AB$ d $2AC$

- (14) In $\triangle ABC$, $m(\angle B) = 90^\circ$ and $m(\angle A) = 60^\circ$, then $AC = \dots AB$
 a 2 b 3 c $\frac{1}{2}$ d $\frac{1}{3}$
- (15) In $\triangle ABC$, $m(\angle B) = 90^\circ$, $m(\angle A) = 30^\circ$ and $AC = 10$ cm, then $BC = \dots$ cm
 a 20 b 15 c 10 d 5
- (16) The measure of exterior angle of the equilateral triangle is \dots°
 a 30 b 60 c 120 d 180
- (17) In $\triangle ABC$, if $AB = AC$, then the exterior angle at the vertex C is
 a acute b obtuse c right d reflex
- (18) In $\triangle ABC$, if $AB = AC$ and $m(\angle A) = 60^\circ$, if its perimeter is 18 cm, then $BC = \dots$ cm.
 a 18 b 3 c 6 d 60
- (19) If the measure of one of the two base angles of the isosceles triangle is 40° , then the measure of its vertex angle is \dots°
 a 40 b 100 c 80 d 50
- (20) ABC is an isosceles triangle, if $m(\angle A) = 100^\circ$, then $m(\angle B) = \dots^\circ$
 a 100 b 180 c 80 d 40
- (21) In $\triangle ABC$, if $AB = AC$ and $m(\angle A) = 40^\circ$, then $m(\angle C) = \dots^\circ$
 a 40 b 70 c 140 d 50
- (22) The triangle which hasn't any axes of symmetry is
 a scalene b isosceles c equilateral d otherwise

(23) If $\triangle ABC$ has one axis of symmetry and $m(\angle B) = 140^\circ$, then $m(\angle A) = \dots\dots^\circ$

a 30

b 20

c 40

d 60

(24) In $\triangle ABC$, if $m(\angle B) = 65^\circ$ and $m(\angle A) = 50^\circ$, then it has axes (axis) of symmetry.

a 0

b 1

c 2

d 3

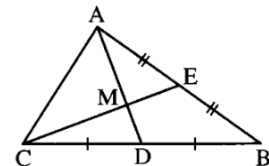
Essay Problems

(1)

In the opposite figure :

E is the midpoint of \overline{AB} , D is the midpoint of \overline{BC}
 $\overline{AD} \cap \overline{CE} = \{M\}$, $MC = 5$ cm. and $MD = 2$ cm.

Find : The length of each of \overline{AD} and \overline{ME} .

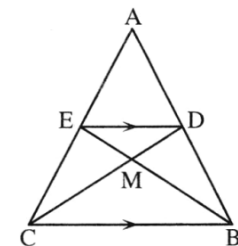


(2)

In the opposite figure :

$\triangle ABC$ is a triangle in which \overline{CD} ,
 \overline{BE} two medians intersect at M,
 if : $DC = 9$ cm. , $BM = 4$ cm. , $BC = 8$ cm.

Find : The perimeter of $\triangle MDE$



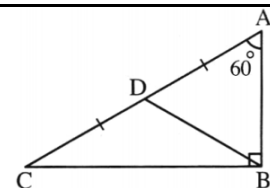
(3)

In the opposite figure : $\triangle ABC$, $AC = 8$ cm. ,

$m(\angle BAC) = 60^\circ$, $m(\angle ABC) = 90^\circ$,

D is the midpoint of \overline{AC}

Find : The perimeter of $\triangle ABD$



(4)

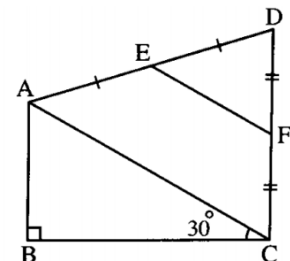
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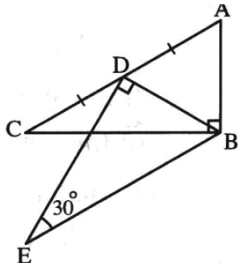
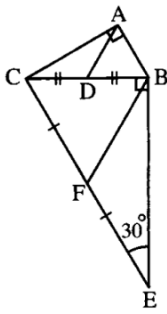
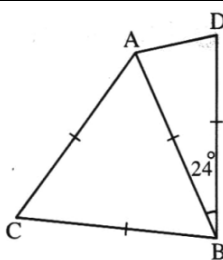
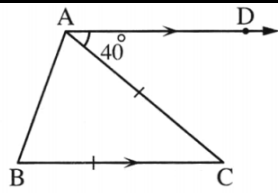
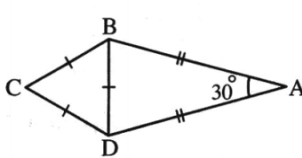
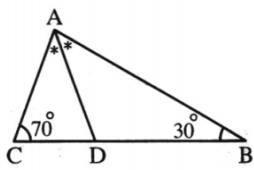
$m(\angle B) = 90^\circ$,

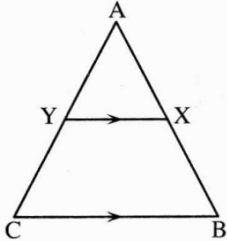
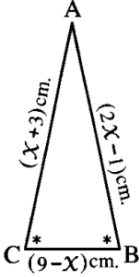
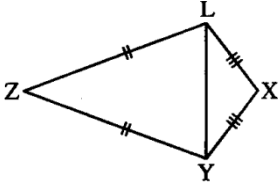
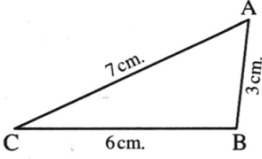
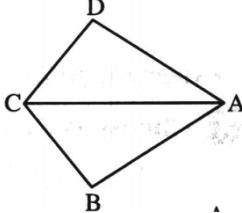
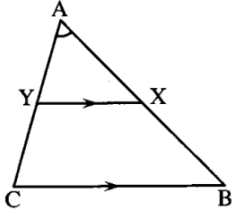
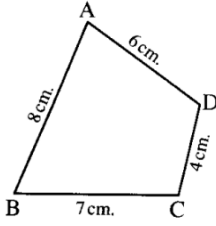
$m(\angle ACB) = 30^\circ$,

E , F are midpoints of \overline{AD} , \overline{DC}

Prove that : $AB = EF$



(5)	<p>In the opposite figure : $m(\angle ABC) = m(\angle BDE) = 90^\circ$ $, m(\angle E) = 30^\circ$ $, D$ is the midpoint of \overline{AC} Prove that : $AC = BE$</p>	
(6)	<p>In the opposite figure : $m(\angle BAC) = m(\angle CBE) = 90^\circ$, $m(\angle BEC) = 30^\circ$, D and F are the midpoints of \overline{BC} and \overline{CE} respectively. Prove that : $AD = \frac{1}{2} BF$</p>	
(7)	<p>In the opposite figure : $ACBD$ is a quadrilateral in which : $AB = BC = CA = BD$ $, m(\angle ABD) = 24^\circ$ Find : $m(\angle CAD)$</p>	
(8)	<p>In the opposite figure : ABC is a triangle , $AC = BC$, $\overline{AD} \parallel \overline{BC}$, $m(\angle DAC) = 40^\circ$ Find : The measure of angles in the $\triangle ABC$</p>	
(9)	<p>In the opposite figure : $AB = AD$, $m(\angle A) = 30^\circ$, $CB = BD = CD$ Find : $m(\angle CBA)$</p>	
(10)	<p>In the opposite figure : \overline{AD} bisects $\angle BAC$ $, m(\angle B) = 30^\circ$ $, m(\angle C) = 70^\circ$ Prove that : $\triangle ADC$ is isosceles triangle.</p>	

(11)	<p>In the opposite figure :</p> <p>ABC is a triangle in which $AB = AC$, $X \in \overline{AB}$, $Y \in \overline{AC}$ and $\overline{XY} \parallel \overline{BC}$</p> <p>Prove that : the triangle AXY is isosceles triangle.</p>	
(12)	<p>In the opposite figure :</p> <p>$m(\angle B) = m(\angle C)$, $AB = (2x - 1) \text{ cm.}$ $AC = (x + 3) \text{ cm.}$ $BC = (9 - x) \text{ cm.}$</p> <p>Find with proof the perimeter of $\triangle ABC$</p>	
(13)	<p>In the opposite figure :</p> <p>$XL = XY$, $ZL = ZY$, M is the midpoint of \overline{LY}</p> <p>Prove that : X , M , Z are on the same straight line.</p>	
(14)	<p>In the opposite figure :</p> <p>Arrange the angles of $\triangle ABC$ descendingly due to their measures</p>	
(15)	<p>In the opposite figure :</p> <p>$AD > DC$ and $AB > BC$</p> <p>Prove that : $m(\angle BCD) > m(\angle BAD)$</p>	
(16)	<p>In the opposite figure :</p> <p>ABC is a triangle , $AB > AC$, $\overline{XY} \parallel \overline{BC}$</p> <p>Prove that : $m(\angle AYX) > m(\angle AXY)$</p>	
(17)	<p>In the opposite figure :</p> <p>$AB = 8 \text{ cm.}$, $BC = 7 \text{ cm.}$, $CD = 4 \text{ cm.}$, $AD = 6 \text{ cm.}$</p> <p>Prove that : $m(\angle BCD) > m(\angle BAD)$</p>	

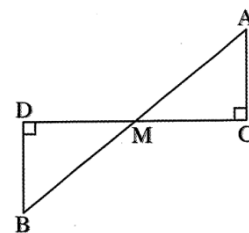
(18)

 In the opposite figure :

$\overline{AB} \cap \overline{CD} = \{M\}$, $\overline{AC} \perp \overline{CD}$ and $\overline{BD} \perp \overline{CD}$

Prove that :

$AB > CD$



(19)

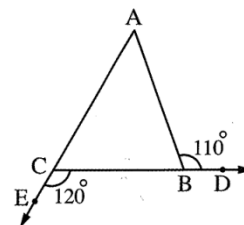
 In the opposite figure :

ABC is a triangle , $D \in \overrightarrow{CB}$,

$E \in \overrightarrow{AC}$, $m(\angle ABD) = 110^\circ$

and $m(\angle BCE) = 120^\circ$

Prove that : $AB > BC$



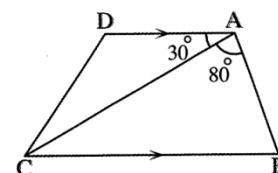
(20)

 In the opposite figure :

$\overrightarrow{AD} \parallel \overrightarrow{BC}$, $m(\angle BAC) = 80^\circ$ and $m(\angle DAC) = 30^\circ$

Prove that :

$BC > AB$



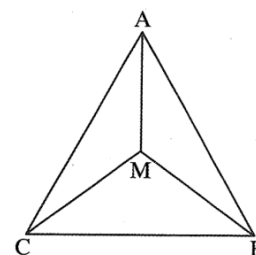
(21)

 In the opposite figure :

ABC is a triangle in which M is a point inside it.

Prove that :

$MA + MB + MC > \frac{1}{2}$ the perimeter of the triangle ABC



حمل الآن

مجانا وحصريا

المراجعة رقم (4)

الترم الاول



2nd prep

Final revision

GEOMETRY

(1) Complete each of the following:

- (1) The longest side in the right –angled triangle is
- (2) If the lengths of two sides in a triangle are 2 cm. and 7 cm , then :
..... < the length of the third side <
- (3) If the measures of two angles in a triangle are different, then the greater in measure of them is opposite to
- (4) If the length of the median drawn from a vertex of a triangle equals half the opposite side to this vertex in length, then
- (5) If the measure of an angle in the isosceles triangle equals 60° , then the triangle is
- (6) The length of any side in a triangle the sum of the lengths of the two other sides.
- (7) If $\overline{AB} \equiv \overline{XY}$, then $AB = \dots\dots\dots$
- (8) In $\triangle ABC$, if $m(\angle A) = 30^\circ$ and $m(\angle B) = 90^\circ$, then $BC = \dots\dots\dots AC$
- (9) The axis of symmetry of a line segment is the straight line
which at its midpoint
- (10) The point of concurrence of the median of the triangle divides each median in the ratio : from the base.
- (11) The base angles of the isosceles triangle are

(12) In the right –angled triangle, the length of the median drawn from the vertex of the right angle equals

(13) In $\triangle ABC$, $m(\angle C) = 100^\circ$, then the longest side in it is

(14) The smallest angle in measure in a triangle is opposite to

(15) In the isosceles triangle, if the measure of the vertex angle is 40° , then the measure of each angle of the base angles equals

(16) The measure of the exterior angle of the equilateral triangle is

(17) In $\triangle ABC$, if $m(\angle A) = 50^\circ$, $m(\angle B) = 60^\circ$, then the smallest side of it is

(18) If $P \in$ the axis of symmetry of BC , then $PB =$

(19) The bisector of the vertex angle of an isosceles triangle is to the base and bisect it.

(20) A cuboid of total area 148 cm^2 . and its lateral area is 110 cm^2 then the area of its base is

(21) The medians of a triangle are

(22) The base angles in an isosceles triangle are

(23) If $m(\angle A) = 155^\circ$, then $m(\text{reflex } \angle A)$ equals

(24) If the measure of an angle in isosceles triangle equals 60° then the triangle is

(25) If the measure of one of the angles in the right-angled triangle is 45° , then the number of axes of symmetry of it is

(26) ABC is a triangle in which $AB = 4 \text{ cm}$, $CB = 7 \text{ cm}$, then $AC \in]$,[

(27) The point that divides the median of the triangle in the ratio $1 : 2$ from the base is the point of intersection of

- (28) In $\triangle ABC$, if $AB > BC$, then $m(\angle A) < m(\angle \dots\dots\dots)$
- (29) The sum of measures of accumulative angles at point is $\dots\dots\dots^\circ$
- (30) If two side lengths in a triangle are 4 cm, 7 cm, then the length of the third side $\in [\dots\dots\dots] \dots\dots\dots$
- (31) The point which equidistance from the terminal of a line segment lie on $\dots\dots\dots$
- (32) In $\triangle ABC$ if $m(\angle A) = 105^\circ$, $m(\angle B) = 60^\circ$, then the longest side in triangle is $\dots\dots\dots$
- (33) If $\overline{AB} \equiv \overline{XY}$ and $AB = 5$ cm. then $2AB - XY = \dots\dots\dots$
- (34) In a triangle, if two angles are unequal in measure, then the greater angle in measure is opposite $\dots\dots\dots$
- (35) If AD is a median in $\triangle ABC$, and M is a point of intersection of its medians and $AM = 12$ cm, then $AD = \dots\dots\dots$
- (36) The type of the triangle which has no lines of symmetry is $\dots\dots\dots$
- (37) The measure of straight angle equals $\dots\dots\dots^\circ$
- (38) 3 cm, 8 cm. and $\dots\dots\dots$ cm, are three sides length of an isosceles triangle.
- (39) The supplement of an angle of measure 30 is an angle of measure $\dots\dots\dots$
- (40) In $\triangle ABC$, if $AB = AC$ and $m(\angle A) = 80^\circ$, then $m(\angle B) = m(\angle \dots\dots\dots) = \dots\dots\dots^\circ$

(2) Choose the correct answer:

(1) $\triangle ABC$ is equilateral, then $m(\angle ACD) = \dots\dots\dots$

- (a) 45° (b) 60° (c) 120° (d) 135°

(2) The lengths which can be lengths of sides of a triangle are

- (a) 0, 3, 5 (b) 3, 3, 5 (c) 3, 3, 6 (d) 3, 3, 7

(3) The triangle in which the measures of two angles of it are 42° and 69° is

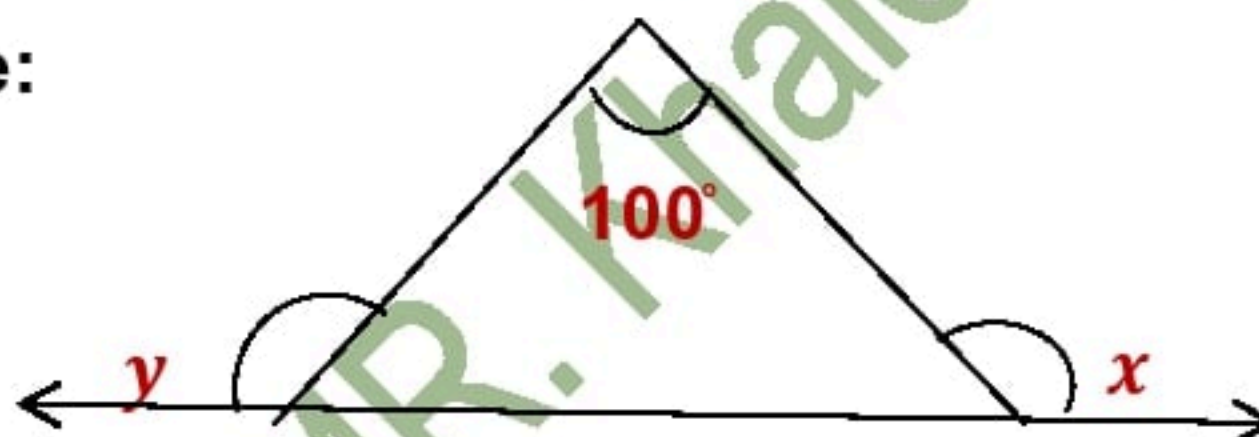
- (a) an isosceles triangle (b) an equilateral triangle
(c) a scalene triangle (d) a right –angled triangle

(4) The sum of lengths of two sides in a triangle is The length of the third side

- (a) greater than (b) smaller than (c) equals to (d) twice

(5) In the opposite figure:

$x + y = \dots\dots\dots$



- (a) 100° (b) 140° (c) 180° (d) 280°

(6) The length of the side opposite to the angle measure 30° in the right-angled triangle equals the length of the hypotenuse

- (a) $\frac{1}{2}$ (b) $\frac{1}{3}$ (c) $\frac{1}{4}$ (d) 2

(7) If the sum of measures of two congruent angles in a triangle = $\frac{2}{3}$ the sum of measures of its angles, then the triangle is

- (a) Isosceles (b) equilateral (c) scalene (d) right –angled

(8) In the square ABCD, \overleftrightarrow{BD} is the symmetry axis of

- (a) \overline{AB} (b) \overline{AC} (c) \overline{AD} (d) \overline{CD}

(9) In $\triangle XYZ$, if $XY = XZ$, then the exterior angle at the vertex Z is

- (a) acute (b) obtuse (c) right (d) reflex

(10) If $\triangle ABC$ is a right-angled at B, $AC = 20$ cm, then the length of the median from B equals

- (a) 10 cm (b) 8 cm (c) 6 cm (d) 5 cm

(11) The number of axis of symmetry of an equilateral triangle is

- (a) 2 (b) 3 (c) zero (d) 1

(12) The acute angle supplements angle

- (a) an acute (b) an obtuse (c) a right (d) a reflex

(13) XYZ is a triangle which $m(\angle Z) = 70^\circ$ and $m(\angle Y) = 60^\circ$, then

YZ XY

- (a) $<$ (b) $>$ (c) $=$ (d) \geq

(15) The triangle which has 3 axis of symmetry is

- (a) Isosceles (b) equilateral (c) scalene (d) right –angled

(16) The point of concurrence divide the median in the ratiofrom the vertex

- (a) 1 : 2 (b) 1 : 3 (c) 2 : 1 (d) 3 : 1

(17) The diagonals are perpendicular in

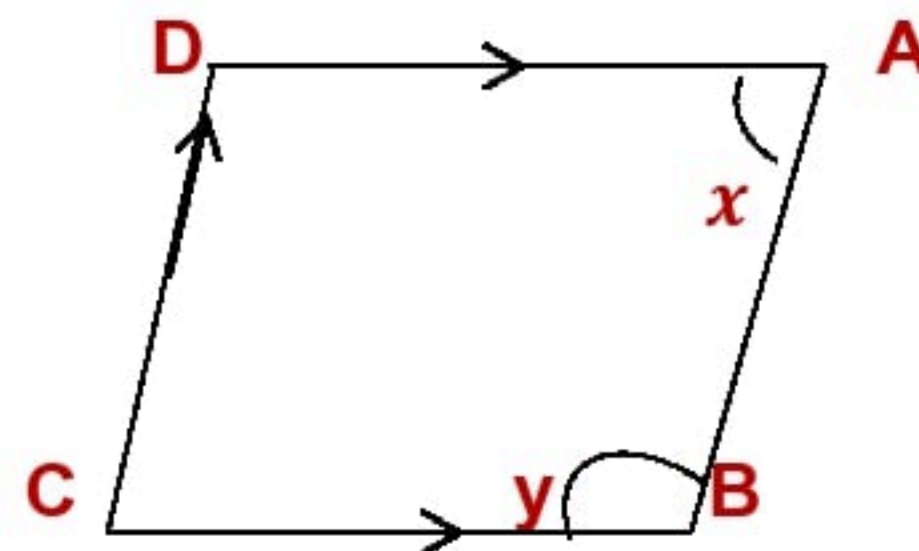
- (a) Trapezium (b) parallelogram (c) square (d) triangle

(18) If ABCD is a parallelogram

$$x : y = 1 : 2$$

Then $m(\angle C) = \dots\dots\dots$

- (a) 60° (b) 120° (c) 180° (d) 360°



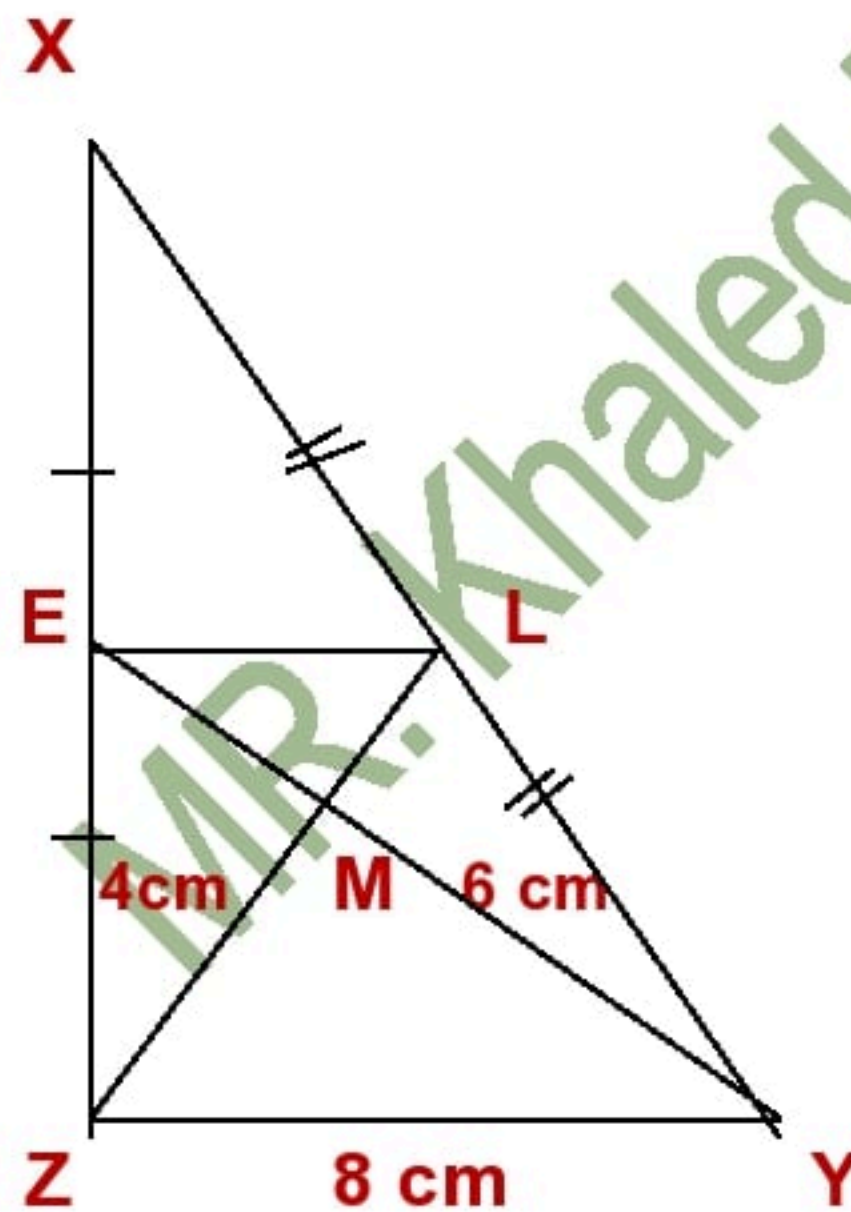
(19) The circumference of a circle =

- (a) $2\pi r$ (b) πr (c) $4\pi r$ (d) $2\pi d$

(20) If ABCD is a square, $AB = 2 \text{ cm}$, then $(AC)^2 = \dots\dots\dots \text{cm}^2$

- (a) 2 (b) 4 (c) 8 (d) $2\sqrt{2}$

(3) In the opposite figure:



△ XYZ in which L and E are midpoints of XY, XZ respectively,
 $YE \cap ZL = \{M\}$, $YZ = 8 \text{ cm}$, $YM = 6 \text{ cm}$, $ZM = 4 \text{ cm}$.

Find: the perimeter of △ MLE

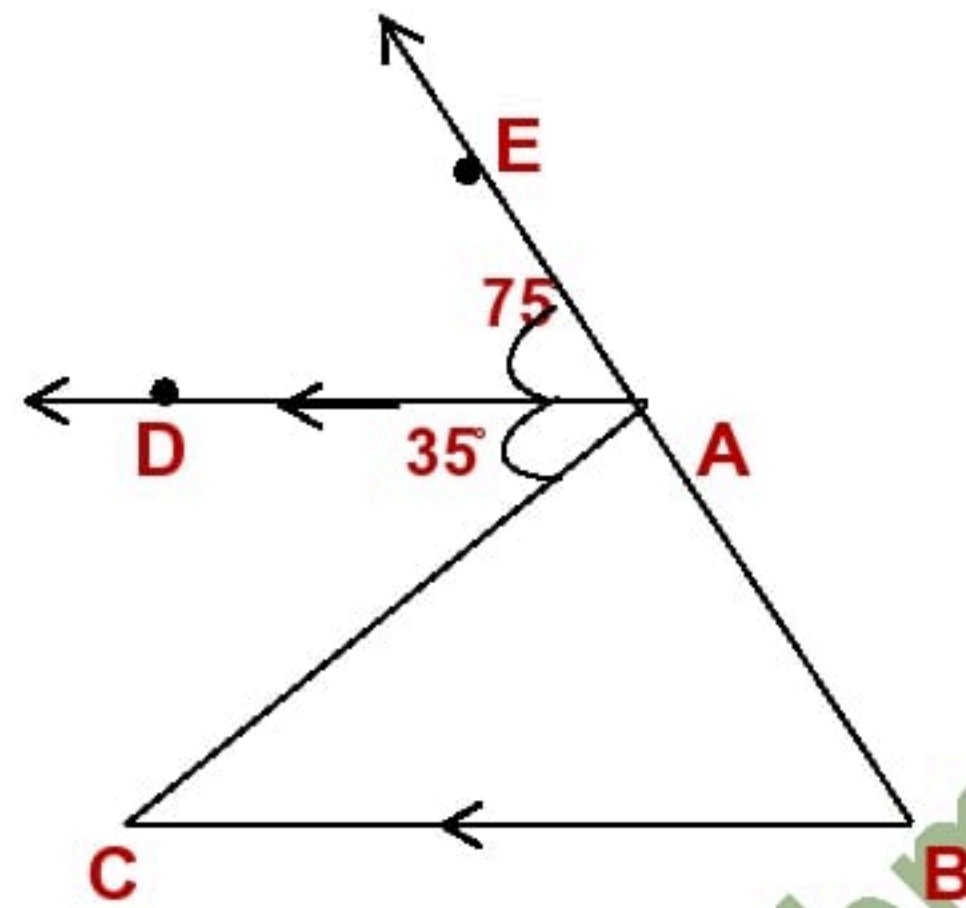
(4) In the opposite figure:

ABC is a triangle, $E \in \overrightarrow{BA}$,

$\overrightarrow{AD} \parallel \overrightarrow{BC}$, $m(\angle CAD) = 35^\circ$,

$m(\angle DAE) = 75^\circ$

Prove that: $AC > AB$

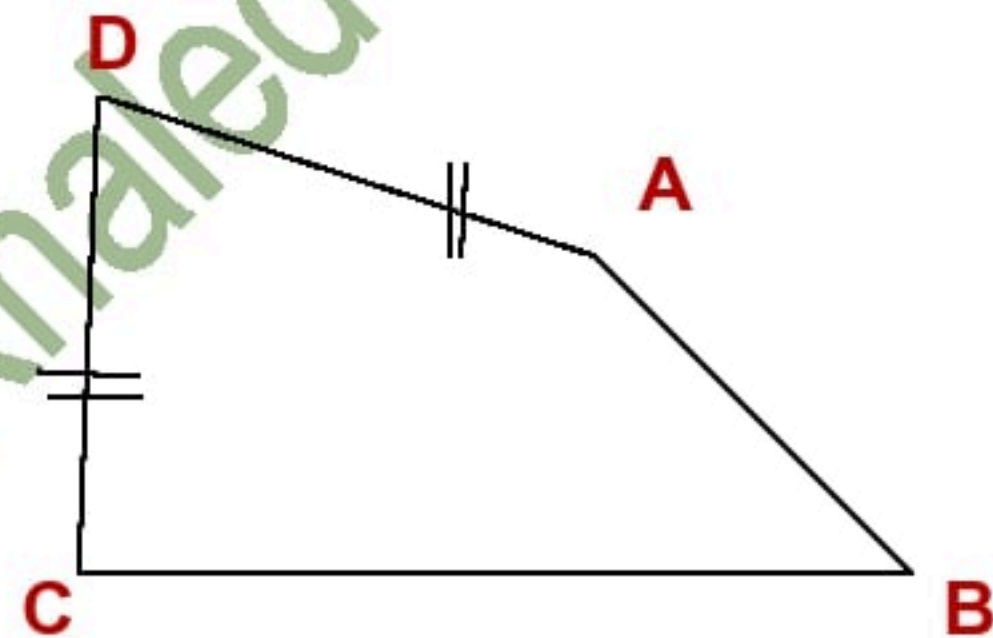


(5) In the opposite figure:

ABCD is a quadrilateral in which $AD = CD$,

$BC > AB$

Prove that: $m(\angle A) > m(\angle C)$



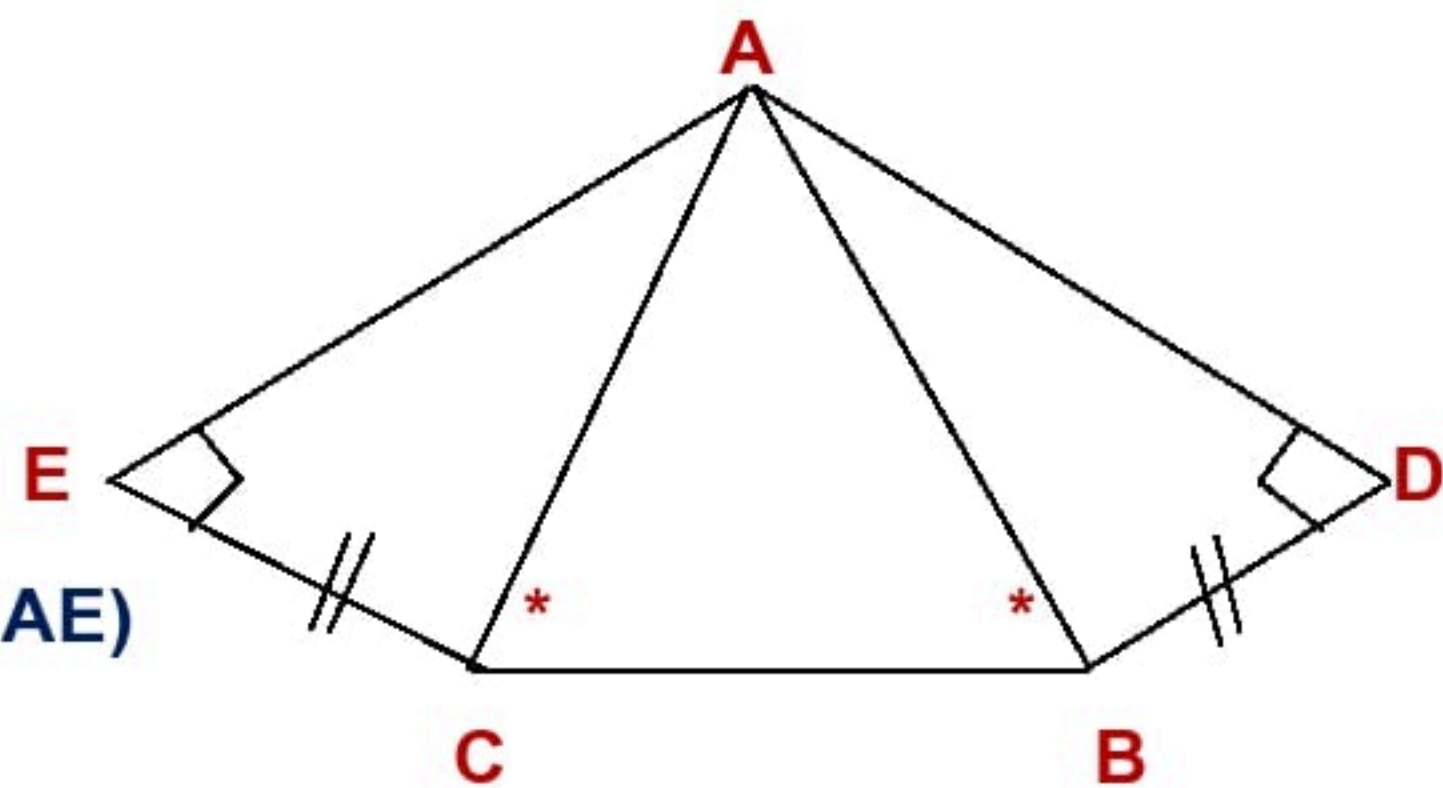
(6) In the opposite figure:

$BD = CE$,

$m(\angle ABC) = m(\angle ACB)$,

$m(\angle D) = m(\angle E) = 90^\circ$

Prove that: $m(\angle DAB) = m(\angle CAE)$



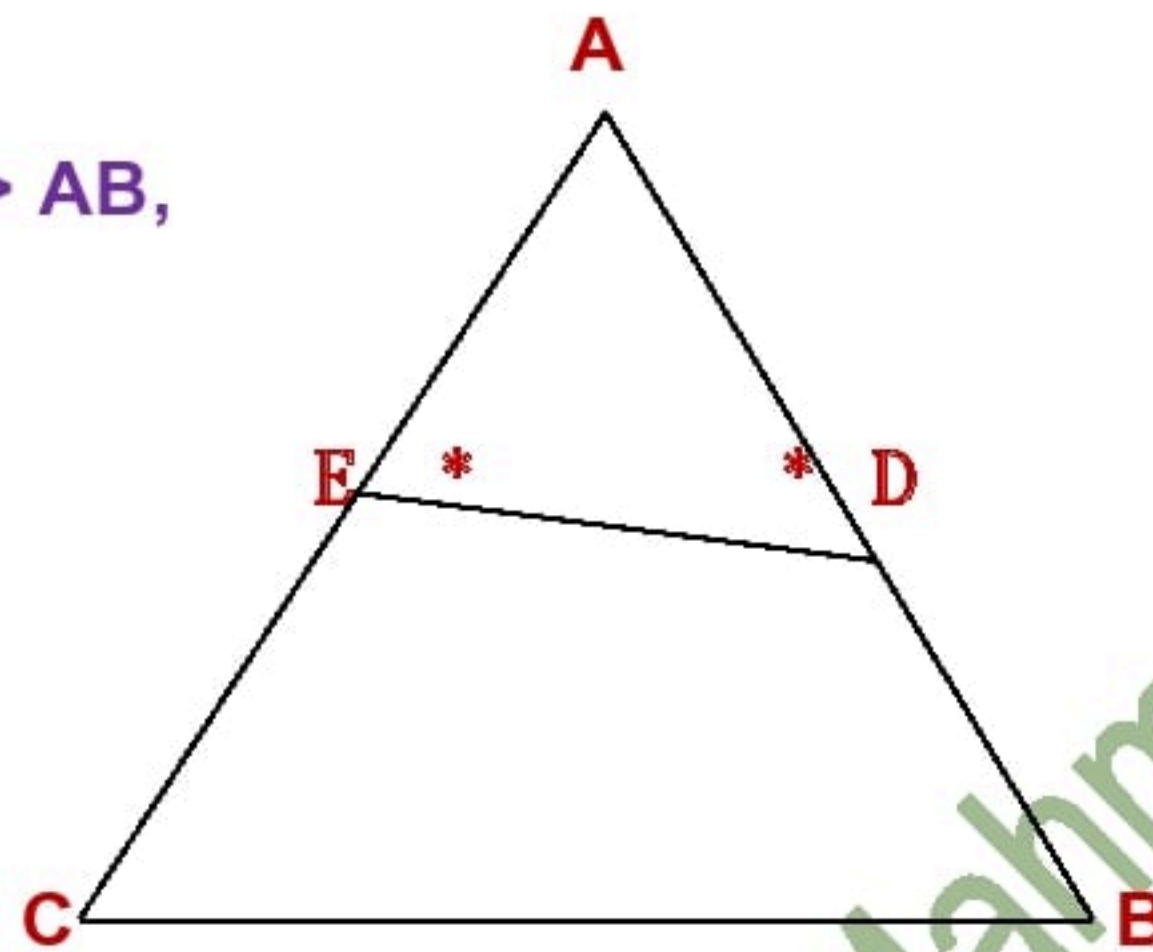
(7) In the opposite figure:

ABC is a triangle in which $AC > AB$,

$D \in \overline{AB}$, $E \in \overline{AC}$

Where $m(\angle ADE) = m(\angle AED)$

Prove that: $EC > DB$



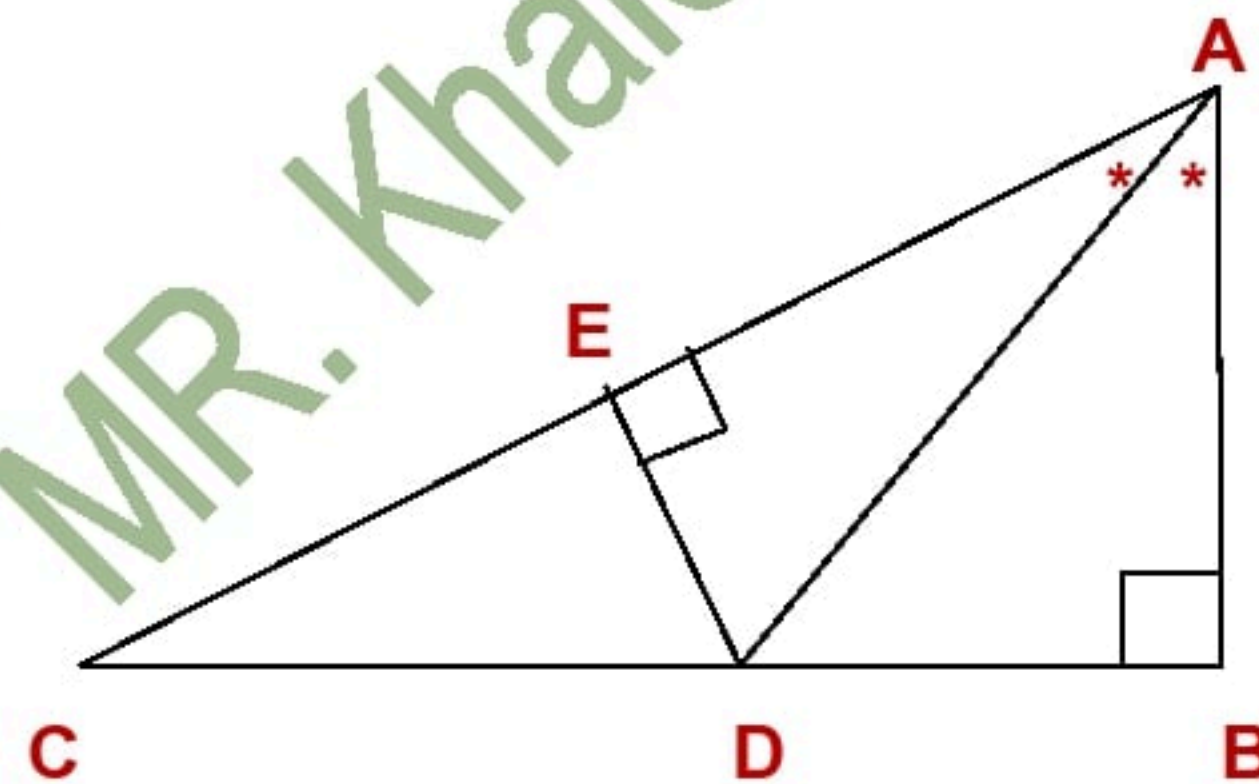
(8) In the opposite figure:

$m(\angle ABC) = 90^\circ$,

$\overline{DE} \perp \overline{AC}$ and \overrightarrow{AD} bisect $\angle BAC$

Prove that:

(1) $BD = DE$ (2) $DC > BD$



(9) In the opposite figure:

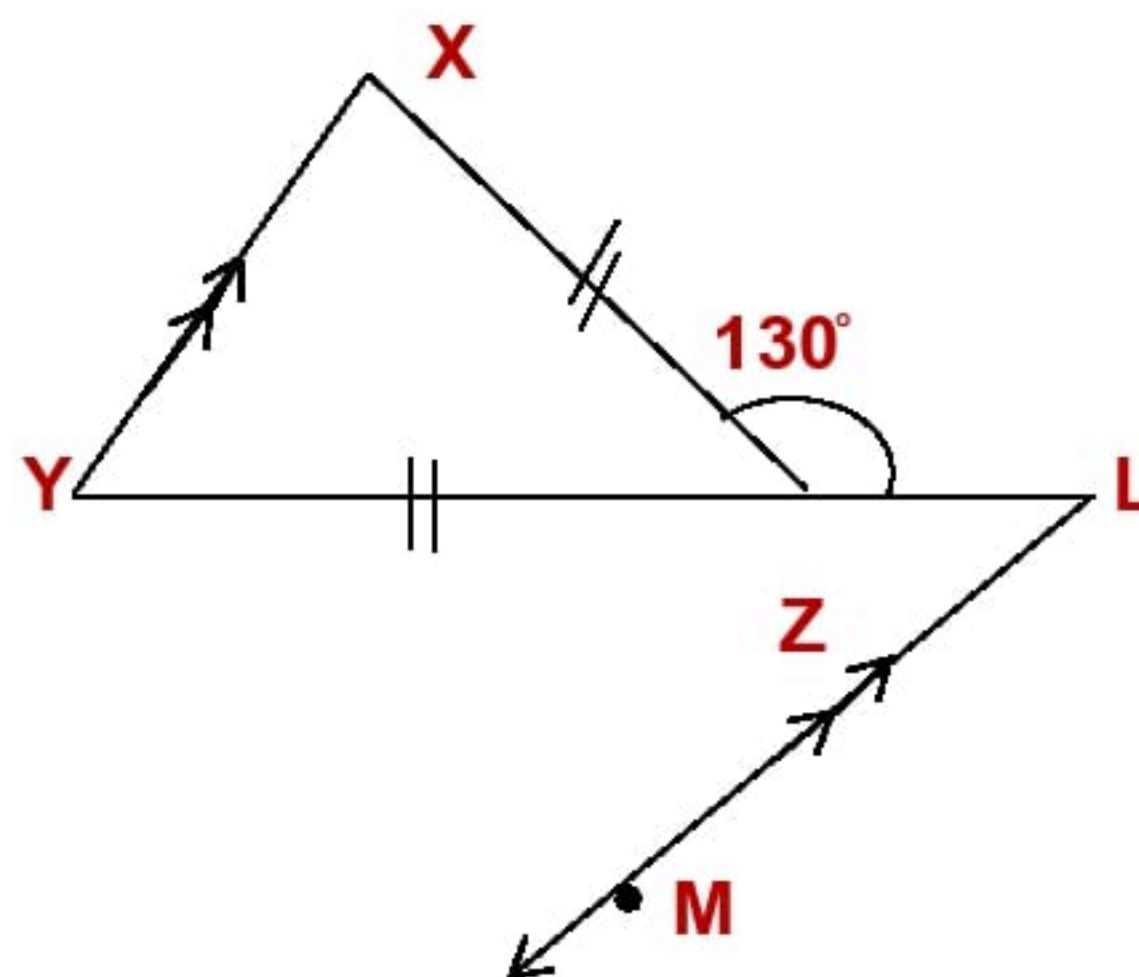
$Z \in \overline{LY}$,

$XZ = YZ$,

$m(\angle LZX) = 130^\circ$

$\overrightarrow{LM} \parallel \overrightarrow{XY}$

Find: $m(\angle MLY)$



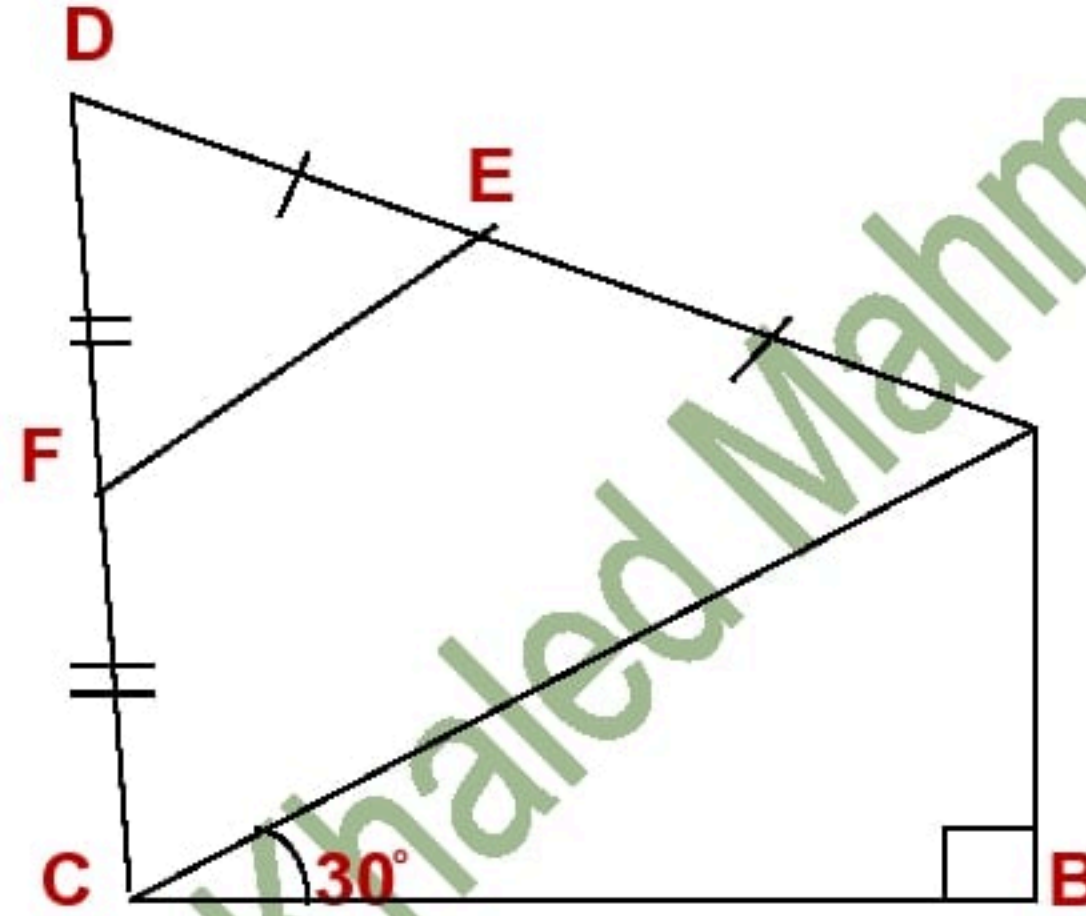
(10) In the opposite figure:

$$m(\angle B) = 90^\circ,$$

$$m(\angle ACB) = 30^\circ$$

If E and F are the midpoints of \overline{AD} and \overline{CD} respectively,

Prove that: $AB = EF$



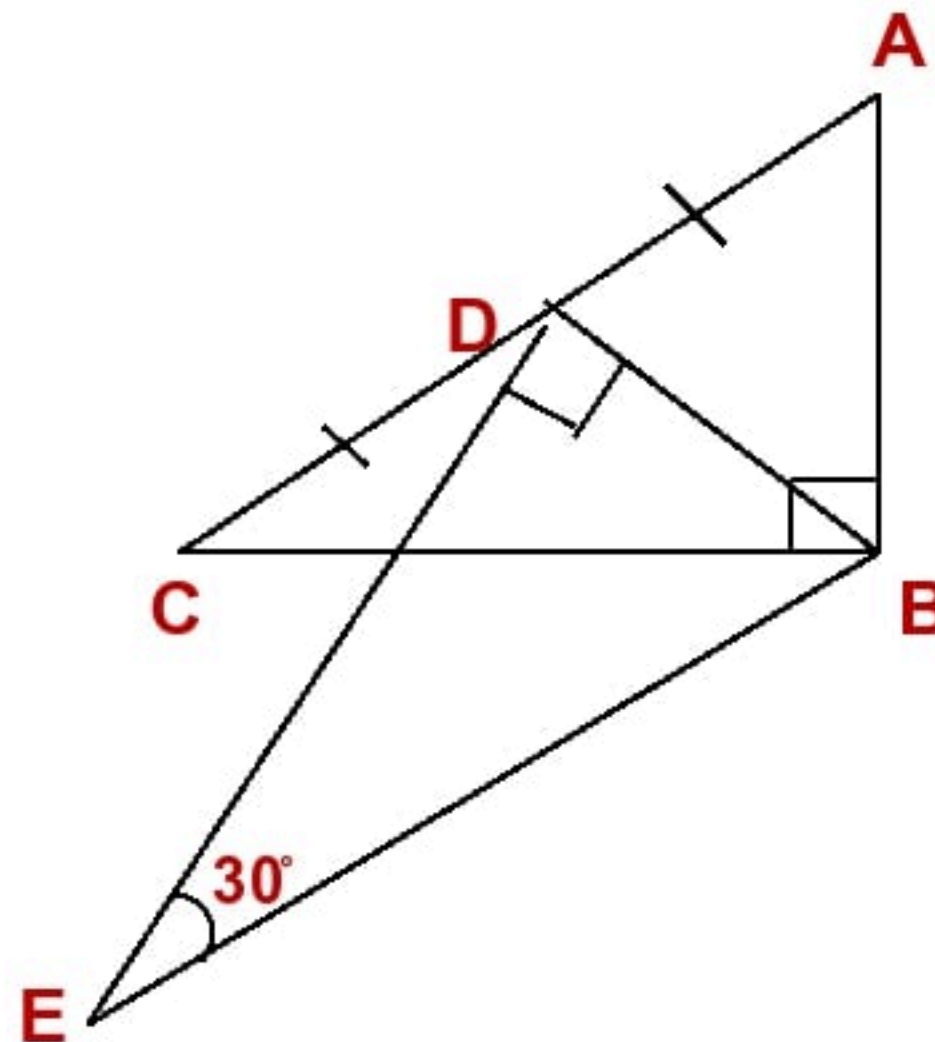
(11) In the opposite figure:

$$m(\angle ABC) = m(\angle BDE) = 90^\circ,$$

$$m(\angle E) = 30^\circ,$$

D is the midpoint of \overline{AC}

Prove that: $AC = BE$



حمل الآن

مجاناً وحصرياً

المراجعة رقم (5)

الترم الاول





1) Complete the following:

- 1) The longest side in the right angle triangle is
- 2) If the lengths of two side in a triangle are 2 cm . and 7 cm ,
then < the length of third side <
- 3) If the measure of two angles in a triangle are different, then the greater measure
of this opposite to
- 4) If the median drawn from a vertex of a triangle equal half the opposite side to
this vertex in length, then
- 5) If the measure of an angle in the isosceles triangle equal 60° , then the triangle is
.....
- 6) If the measure of an angle in right angle triangle is 45° then the triangle is
- 7) The length of any side in a trianglethe sum of lengths of the
two other sides.
- 8) In ΔABC of $m(\angle A) = 30^\circ$ and $m(\angle B) = 90^\circ$, then $BC = \dots\dots\dots AC$
- 9) The axis of symmetry of a line segment is the straight line which
at its midpoint
- 10) The number of axes of symmetry in the equilateral triangle equals
- 11) The length of median which is drawn from the vertex of the right angle in the
right angle triangle equals
- 12) The bisector of the vertex angle of the isosceles triangle
- 13) If the measure of one of angle of the right angle triangle is 45° , then the
triangle is
- 14) The two bases angles of the isosceles triangle are
- 15) The measure of the exterior angle of equilateral triangle is
- 16) The median of the triangle intersect at





- 17) The perpendicular which is drawn from the vertex of an isosceles triangle to its bases
- 18) If the length of two sides in an isosceles triangle are 12 cm .and 6 cm , then the length of the third side equals cm
- 19) The longest side of the right angle triangle is
- 20) If the lengths of two side in an isosceles triangle are 6 cm , and 3 cm then length of third side equals
- 21) The angle of equilateral triangle are in measure and the measure of each of its two base angles equal
- 22) In $\triangle DEF$ if $m(\angle E) = 125^\circ$, then the longest side in this triangle is

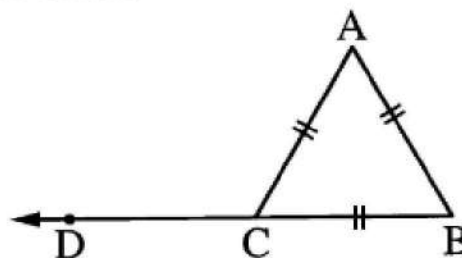




Choose the correct answer from the given ones:

23) ΔABC is equilateral , then $m(\angle ACD)$

- a) 45° b) 60°
c) 120° d) 135°



24) In ΔABC which is right angle at B if $AC = 20$ cm , then the length of the median of the triangle drawn from B equals

- a) 10 cm b) 8 cm c) 6 cm d) 5 cm

25) XYZ is a triangle in which: $m(\angle Z) = 70^\circ$ and $m(\angle Y) = 60^\circ$, then YZ XY

- a) $>$ b) $<$ c) $=$ d) twice

26) The lengths which can be lengths of sides of a triangle are

- a) 0 , 3 , 5 b) 3 , 3 , 5 c) 3 , 3 , 6 d) 3 , 3 , 7

27) The triangle in which the measure of two angles of its are 42° and 69° is

- a) an isosceles triangle b) an equilateral triangle
c) a scalene triangle d) a right angle triangle

28) The triangle which has three axes of symmetry is triangle

- a) scalene b) isosceles c) right angled d) equilateral

29) The sum of lengths of two sides in triangle is the length of the third side

- a) greater than b) smaller than c) equal to d) twice

30) In ΔABC if $m(\angle B) = 130^\circ$, then the longest side of it is

- a) BC b) AC c) AB d) its median

31) ΔXYZ I an isosceles triangle in which : $m(\angle X) = 100^\circ$, then

$m(\angle Y) =$ $^\circ$

- a) 100 b) 80 c) 60 d) 40





- 32) The measure of exterior angle of the equilateral triangle equals°
 a) 60 b) 90 c) 100 d) 120
- 33) The number of axes of symmetry of the isosceles triangle equals
 a) three b) two c) one d) no one
- 34) ΔABC $m(\angle A) = 50^\circ$, $m(\angle B) = 60^\circ$, then the longest side of it is
 a) AB b) AC c) BC d) CB
- 35) ΔXYZ is right angle at Y, then XZ YZ
 a) $>$ b) $<$ c) $=$ d) \leq
- 36) The length of the median drawn from the vertex of the right angle in the right angle triangle =hypotenuse
 a) third b) quarter c) half d) twice
- 37) The number of axes of symmetry of the isosceles triangle is
 a) zero b) 1 c) 2 d) 3
- 38) The numbers 5, 4, can be length of sides of a triangle
 a) 8 b) 9 c) 10 d) 12
- 39) If the length of two sides of an isosceles triangle are 13 cm and 6 cm, then the length of third side iscm
 a) 13 b) 8 c) d) 6
- 40) If the measure of two angles in triangle are 50° , 80° then the triangle is
 a) scalene b) an isosceles triangle
 c) an equilateral triangle d) a right angled triangle



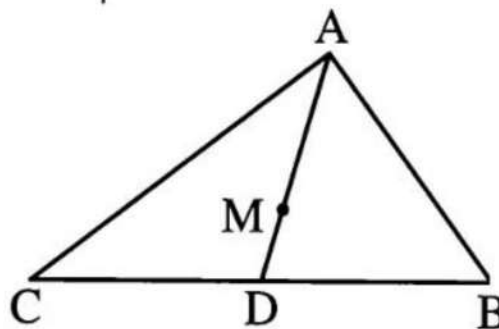
**41) In the opposite side figure**

AD is a median in ΔABC

M is the point of intersection of

The median , $MD = 2 \text{ cm}$,

Then $AD = \dots\dots\dots\text{cm}$



- a) 2 b) 4 c) 6 d) 8

42) If the measure of one of the two base angles in the isosceles triangle is 40° , then the measure of the vertex angle is $\dots\dots\dots^\circ$

- a) 100 b) 55 c) 70 d) 110

43) Which of the following number can be the lengths of sides of a triangle?

- a) 4 , 6 , 10 b) 4 , 6 , 8 c) 2 , 3 , 6 d) 4 , 5 , 10

44) The number of axes of symmetry of the isosceles triangle equals $\dots\dots$

- a) 3 b) 2 c) 1 d) zero

45) If ΔABC is right angle triangle at B , $AB = 6 \text{ cm}$ and $BC = 8 \text{ cm}$, then the length of the median drawn from B is $\dots\dots\dots \text{cm}$

- a) 10 b) 8 c) 6 d) 5

46) ΔABC in which $m(\angle B) > m(\angle C)$, then $AC \dots\dots\dots AB$

- a) Greater than b) smaller than
c) equals d) smaller than or equals



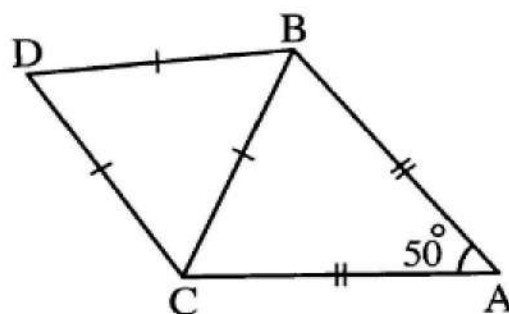


2) In the opposite figure :

$$m(\angle A) = 50^\circ \quad AB = AC$$

and $\triangle ABC$ is equilateral

Find: $m(\angle ABD)$

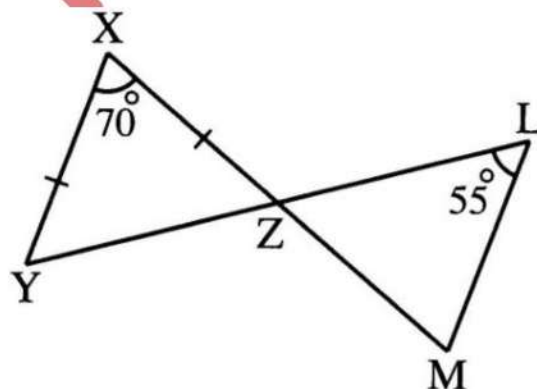


In the opposite figure :

$$XZ = XY, \quad m(\angle ZLM) = 55^\circ$$

$$, \quad m(\angle X) = 70^\circ$$

Prove that: $ML = MZ$



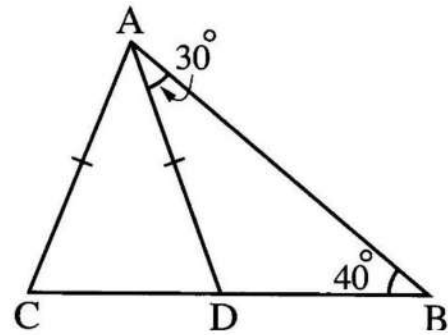


3) In the opposite figure :

$$AD = AC, m(\angle B) = 40^\circ,$$

$$m(\angle BAD) = 30^\circ, B \in CD$$

Prove that : $AB = CB$

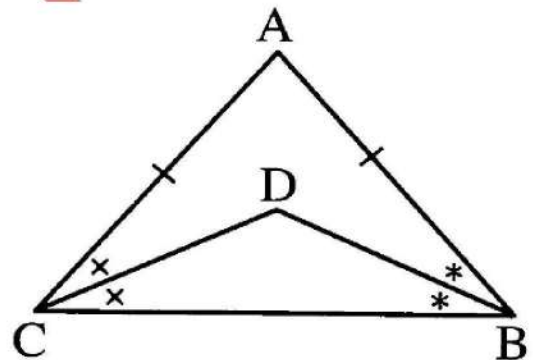


4) In the opposite figure :

$$AB = AC, BD \text{ bisects } CB$$

and CD bisects $\angle C$

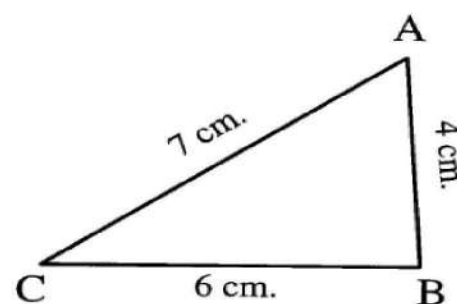
prove that : $\triangle ABC$ is an isosceles





5) In the opposite figure :

Arrange the angles of ΔABC in descending order due to their measure



6) In ΔABC : $AB = 7\text{ cm}$, $BC = 5\text{ cm}$ and $AC = 6\text{ cm}$, Arrange the angles of ΔABC in descending order due to their measure

7) In ΔABC : $m(\angle A) = 40^\circ$ and $m(\angle B) = 80^\circ$, Arrange the lengths of the sides of the triangle ABC in descending order



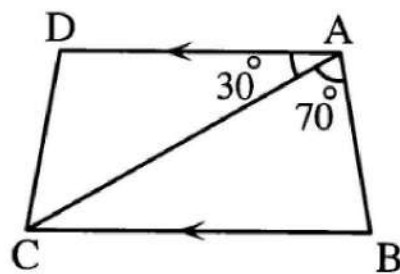


8) In the opposite figure:

$AD \parallel BC$, $m(\angle BDC) = 70^\circ$

$m(\angle E) = 30^\circ$,

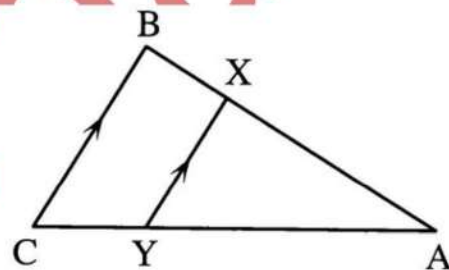
Prove that: $AC > BC$



9) In the opposite figure:

$AB > BC$, $XY \parallel BC$

Prove that: $AX > XY$

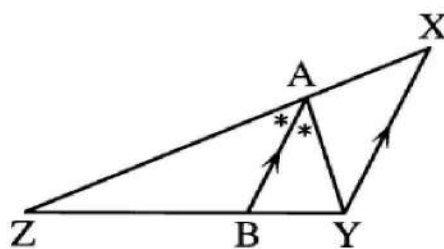




10) In the opposite figure:

$AB \parallel XY$, AB bisects $\angle YAZ$

Prove that : $XZ > YZ$

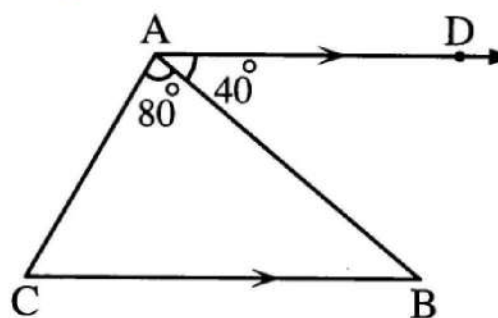


11) In the opposite figure:

ΔABC in which $AD \parallel CB$

$m(\angle DAB) = 40^\circ$, $m(\angle BAC) = 80^\circ$

prove that: $AB > AC$



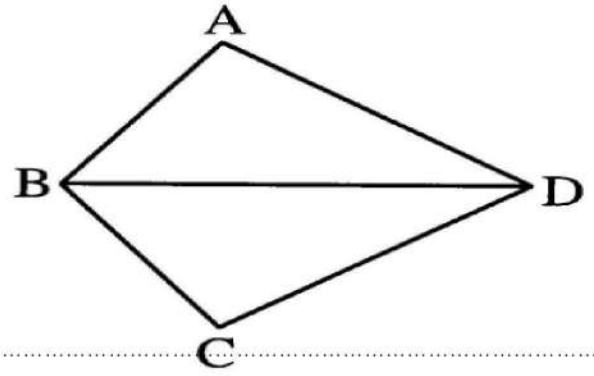


12) In the opposite figure:

$$AB > AD, BC < CD$$

Prove that:

$$m(\angle ABC) > m(\angle ADC)$$

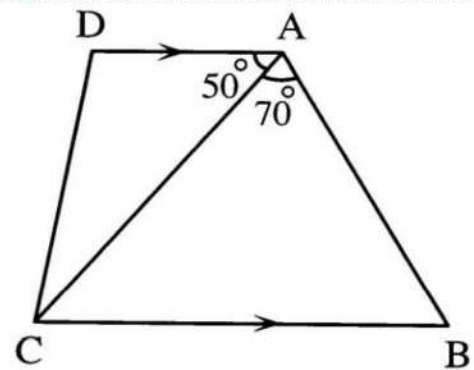


13) In the opposite figure:

$$AD \parallel BC, m(\angle BAC) = 70^\circ$$

$$m(\angle DAC) = 50^\circ$$

Prove that: $BC > AC$



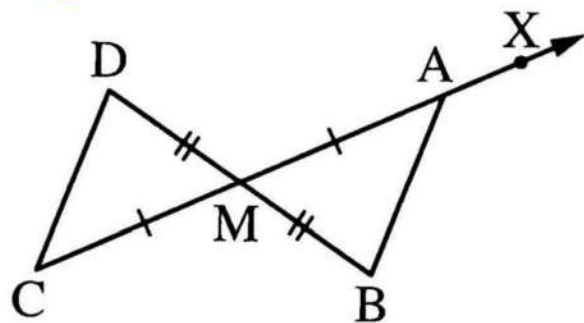


14) In the opposite figure:

M is the midpoint of each of AC and BD

Let $X \in CA$ Prove that:

$$m(\angle BAX) > m(\angle D)$$



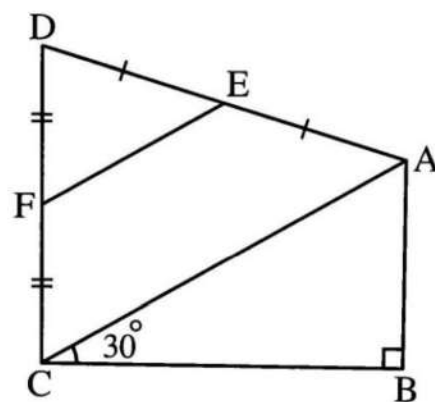
15) In the opposite figure:

$$m(\angle B) = 90^\circ, m(\angle ACB) = 30^\circ,$$

E is the midpoint of AD,

F is the midpoint of CD

Prove that: $AB = EF$





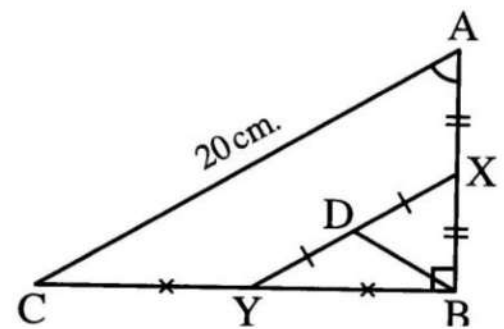
16) In the opposite figure:

$m(\angle ABC) = 90^\circ$, X is the mid point of AB

Y is the midpoint of BC

D is the midpoint of XY, $AC = 20$ cm

Find the length of: BD



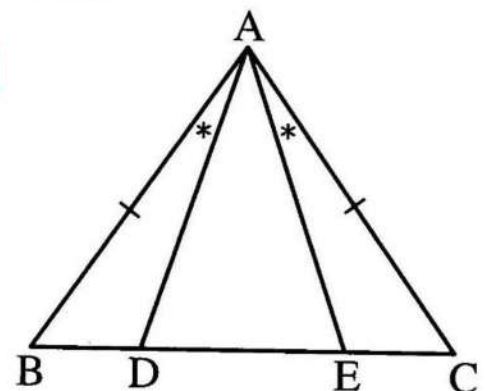
17) In the opposite figure:

$AB = AC$, $m(\angle BAD) = m(\angle CAE)$

Prove that:

a) $AD = AE$

b) $BD = CE$





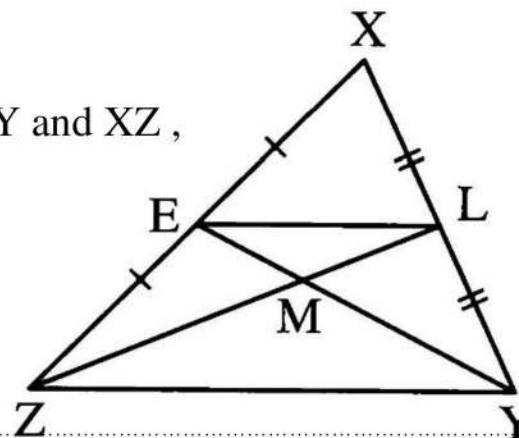
18) In the opposite figure:

$\triangle XYZ$ in which : L and E are the midpoint of XY and XZ ,

$YE \cap ZL = \{M\}$, $YZ = 8$ cm ,

$YM = 6$ cm , $ZM = 4$ cm

Find the perimeter of: $\triangle MLE$

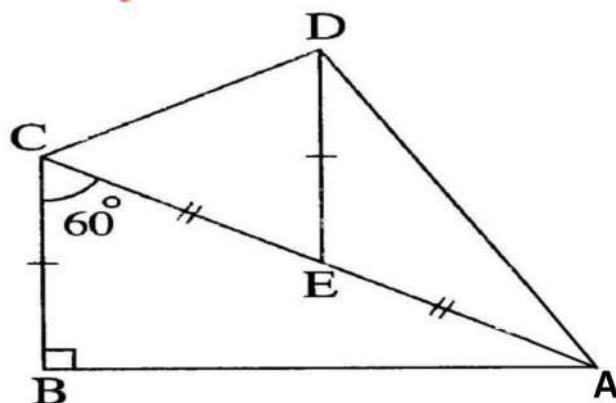


19) In the opposite figure:

ABC is a right angled triangle at B,

$m(\angle ACB) = 60^\circ$,

Prove that: $m(\angle ADC) = 90^\circ$



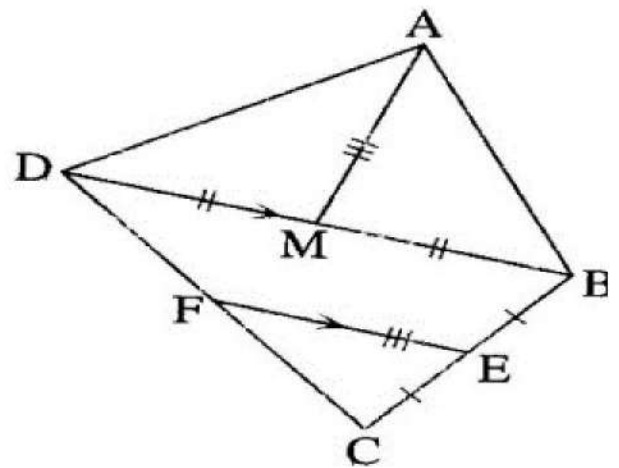
**20) In the opposite figure:**

ABC is a triangle, M is the midpoint at \overline{BD}

, E is the midpoint at \overline{BC} , $F \in \overline{CD}$

, $\overline{EF} \parallel \overline{BD}$ and $AM = EF$

Prove that: $m(\angle BAD) = 90^\circ$

**21) In the opposite figure:**

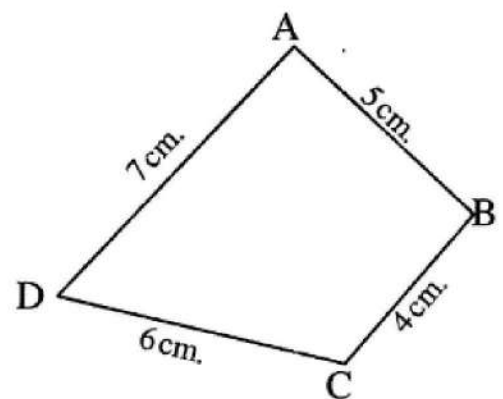
ABCD is quadrilateral in which:

$AB = 5 \text{ cm}$, $BC = 4 \text{ cm}$, $CD = 6 \text{ cm}$, $DA = 7 \text{ cm}$

Prove that:

1) $m(\angle ABC) > m(\angle ADC)$

2) $m(\angle BCD) > m(\angle BAD)$



حمل الآن

مجاناً وحصرياً

المراجعة رقم (6)

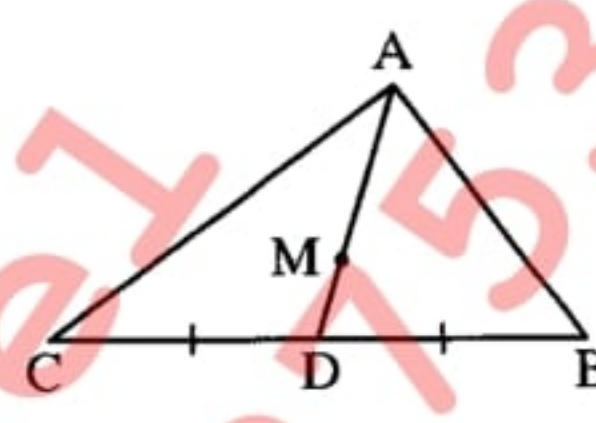
الترم الاول



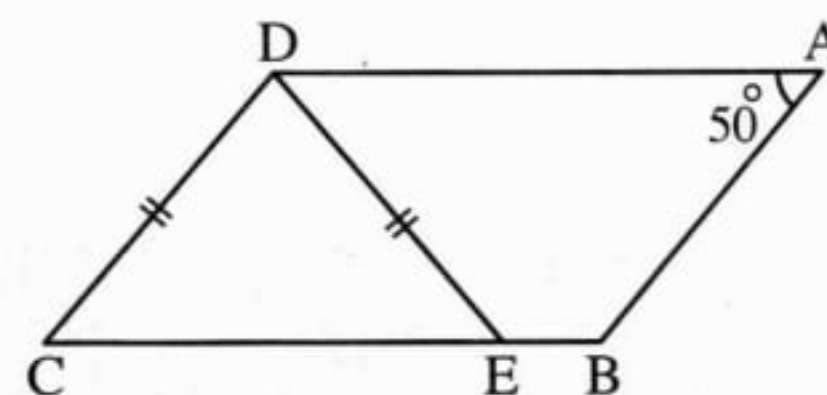
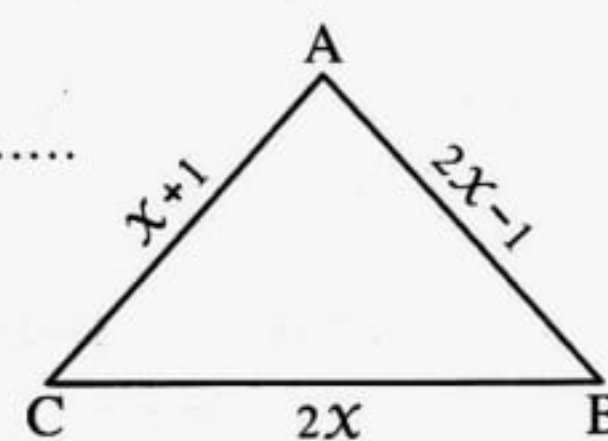
Exercises

[A] : Choose The Correct Answer : -

1	The medians of the triangle intersect at point. (a) 1 (b) 2 (c) 3 (d) 4	A
2	The number of medians in the right-angled triangle = (a) 3 (b) 2 (c) 1 (d) 0	A
3	The point of intersection of the medians in the triangle divides each of them by the ratio from the vertex. (a) 1 : 3 (b) 3 : 1 (c) 2 : 1 (d) 1 : 2	C
4	The point of concurrence of the medians of the triangle divides each median in the ratio of from the base. (a) 1 : 2 (b) 1 : 3 (c) 2 : 1 (d) 3 : 1	A
5	If \overline{AD} is a median of triangle ABC , and M is the point of intersection of the medians , then $AM = \dots\dots\dots AD$ (a) $\frac{1}{3}$ (b) $\frac{2}{3}$ (c) $\frac{1}{2}$ (d) $\frac{1}{4}$	B
6	If \overline{AD} is a median in $\triangle ABC$, M is the point of intersection of its medians , then $AM = \dots\dots\dots MD$ (a) 2 (b) $\frac{1}{2}$ (c) 3 (d) $\frac{1}{3}$	A
7	If \overline{XE} is a median in $\triangle XYZ$, M is the point of intersection of its medians , then $EM = \dots\dots\dots XE$ (a) $\frac{1}{2}$ (b) 2 (c) $\frac{1}{3}$ (d) $\frac{2}{3}$	C
8	In $\triangle ABC$: If $AD = 6$ cm. is a median and M is a point of concurrent , then $MA = \dots\dots\dots$ cm. (a) 6 cm. (b) 3 cm. (c) 2 cm. (d) 4 cm.	D
9	The length of the hypotenous of the right-angled triangle = the length of the median which drawn from the vertex of the right-angle. (a) half (b) twice (c) third (d) quarter	B

10	<p>If \overline{AD} is a median of $\triangle ABC$, M is the point of intersection of its medians and $AM = 6$ cm. , then $AD = \dots\dots\dots$</p> <p>(a) 12 cm. (b) 6 cm. (c) 18 cm. (d) 9 cm.</p>	D
11	<p>Choose the correct answer :</p> <p>In the opposite figure :</p> <p>\overline{AD} is a median in $\triangle ABC$, M is the point of intersection of the medians, $MD = 2$ cm. , then $AD = \dots\dots\dots$ cm.</p> <p>(a) 2 (b) 4 (c) 6 (d) 8</p>	 <p>C</p>
12	<p>In the right-angled triangle, the length of the median from the vertex of the right angle equals $\dots\dots\dots$ the length of hypotenuse.</p> <p>(a) half (b) twice (c) third (d) forth</p>	A
13	<p>In $\triangle ABC$ which is right at B, if $AC = 20$ cm. , then the length of the median of the triangle drawn from B equals $\dots\dots\dots$</p> <p>(a) 10 cm. (b) 8 cm. (c) 6 cm. (d) 5 cm.</p>	A
14	<p>The length of the side opposite to the angle of measure 30° in the right-angled $\dots\dots\dots$ the length of the hypotenuse.</p> <p>(a) twice (b) half (c) square (d) equals</p>	B
15	<p>Triangle ABC : If $m(\angle A) = 30^\circ$, $m(\angle B) = 90^\circ$, then $BC = \dots\dots\dots$</p> <p>(a) $\frac{1}{2} AB$ (b) $\frac{1}{2} AC$ (c) $2 AB$ (d) $2 AC$</p>	B
16	<p>In $\triangle ABC$ if : $m(\angle B) = 90^\circ$ and $m(\angle A) = 60^\circ$, then $AC = \dots\dots\dots AB$</p> <p>(a) 2 (b) = (c) $\frac{1}{2}$ (d) $\frac{1}{3}$</p>	A
17	<p>In $\triangle ABC$: $m(\angle A) = 30^\circ$, $m(\angle B) = 90^\circ$, $AC = 10$ cm. , then $BC = \dots\dots\dots$ cm.</p> <p>(a) 20 (b) 15 (c) 10 (d) 5</p>	D
18	<p>In the rectangle $ACBD$, if $AC = 10$ cm. , then $BD = \dots\dots\dots$</p> <p>(a) 5 (b) 10 (c) 15 (d) 20</p>	B
19	<p>In any isosceles triangle, the type of the base angles is $\dots\dots\dots$</p> <p>(a) acute. (b) right. (c) obtuse. (d) reflex.</p>	A
20	<p>The base angles of the isosceles triangle are $\dots\dots\dots$</p> <p>(a) congruent. (b) alternate. (c) corresponding. (d) supplementary.</p>	A

21	If measure of one of the two base angles of the isosceles triangle equals 40° then the measure of the vertex angle = $^\circ$ (a) 40 (b) 100 (c) 80 (d) 50	B
22	In $\triangle ABC : AB = AC$, $m(\angle B) = 50^\circ$, then $m(\angle A) = \dots\dots\dots^\circ$ (a) 65 (b) 80 (c) 50 (d) 100	B
23	In the isosceles triangle , if the measure of one of the two base angle is 70° , then the measure of its vertex angle is (a) 70° (b) 110° (c) 20° (d) 40°	D
24	In a triangle ABC : If $AB = AC$ and $m(\angle A) = 40^\circ$, then $m(\angle C) = \dots\dots\dots$ (a) 40° (b) 70° (c) 140° (d) 50°	B
25	If the measure of an angle of the isosceles triangle is 100° , then the measure of one of the other angles = (a) 50° (b) 80° (c) 40° (d) 100°	C
26	The triangle whose sides lengths are 2 cm. , $(x + 1)$ cm and 5 cm. becomes an isosceles triangle when $x = \dots\dots\dots$ cm. (a) 1 (b) 2 (c) 3 (d) 4	D
27	The triangle whose sides lengths are 3 cm. , $(x + 5)$ and 9 becomes an isosceles if $x = \dots\dots\dots$ cm. (a) 3 (b) 4 (c) 5 (d) 6	B
28	In the opposite figure : ABC is a triangle in which : $m(\angle B) = m(\angle C)$, then $x = \dots\dots\dots$ (a) 1 (b) 2 (c) 3 (d) 4	B
29	ABCD is a parallelogram : $DE = DC$, $m(\angle A) = 50^\circ$, then $m(\angle EDC) = \dots\dots\dots$ (a) 50° (b) 60° (c) 70° (d) 80°	D
30	In $\triangle ABC$: if $AB = AC$ and $m(\angle A) = 60^\circ$, if its perimeter is 18 cm. , then $BC = \dots\dots\dots$ cm. (a) 18 (b) 6 (c) 3 (d) 60	B



31	ΔABC , $AB = AC$, D is the midpoint of \overline{BC} , then \overline{AD} is (a) median. (b) altitude. (c) bisector of the vertex angle. (d) all the previous.	D
32	The measure of exterior angle of an equilateral triangle = (a) 30° (b) 60° (c) 120° (d) 180°	C
33	In ΔXYZ : if $XY = XZ$, then the exterior angle at the vertex Z is (a) acute. (b) obtuse. (c) right. (d) reflex.	B
34	The axis of symmetry of a line segment is the straight line which is (a) Perpendicular to it. (b) its bisector. (c) parallel to it. (d) the perpendicular bisector.	D
35	If $A \in$ the axis of symmetry of \overline{BC} , then $\overline{AB} \dots\dots \overline{AC}$ (a) \perp (b) \equiv (c) $//$ (d) $=$	B
36	The number of axis of symmetry in the scalene triangle is (a) 1 (b) zero (c) 3 (d) 4	B
37	The number of axes of symmetry in the isosceles triangle is (a) 1 (b) 2 (c) 3 (d) zero	A
38	The equilateral triangle has axes of symmetry. (a) one (b) two (c) three (d) otherwise	C
39	The triangle which has no axes of symmetry is triangles. (a) scalene (b) isosceles (c) equilateral (d) otherwise	A
40	If ΔABC has one axes of symmetry and $m(\angle ABC) = 140^\circ$, then $m(\angle A) = \dots\dots$ (a) 30° (b) 20° (c) 40° (d) 60°	B
41	ΔABC in which $m(\angle A) = m(\angle B) = 65^\circ$, then it has axis (axes) of symmetry. (a) 1 (b) 2 (c) 3 (d) zero	A
42	The quadrilateral ABCD in which \overline{BD} is an axis of symmetry of \overline{AC} may be (a) a rhombus (b) a rectangle (c) a parallelogram (d) a trapezium	A

43	In $\triangle ABC$, $AB > AC$, then $m(\angle C)$ $m(\angle B)$ (a) $<$ (b) $>$ (c) $=$ (d) \leq	B
44	In $\triangle ABC$, $AB > AC$, $m(\angle C) = 70^\circ$, then $m(\angle B)$ may be (a) 70° (b) 50° (c) 80° (d) 75°	B
45	In $\triangle ABC$: $AB = AC$, $m(\angle B) = 65^\circ$, then : AC BC (a) $<$ (b) $>$ (c) $=$ (d) \leq	B
46	In $\triangle ABC$: If $AB = 9$ cm. , $BC = 6$ cm. , $AC = 7$ cm. , then the smallest angle is (a) $\angle BAC$ (b) $\angle ABC$ (c) $\angle ACB$ (d) $\angle BCA$	A
47	$\triangle XYZ$, $m(\angle X) = 60^\circ$, $m(\angle Y) = 40^\circ$, then XZ XY (a) $<$ (b) $>$ (c) $=$ (d) nothing.	A
48	$\triangle ABC$, $m(\angle B) = 90^\circ$, then AB AC (a) $>$ (b) $=$ (c) $<$ (d) \geq	C
49	In $\triangle XYZ$: If $m(\angle X) = 30^\circ$ and $m(\angle Y) = 80^\circ$, then (a) $XY < XZ$ (b) $XY > XZ$ (c) $XY = XZ$ (d) $XY < YZ$	A
50	The triangle in which the measure of two angles are 74° and 53° is triangle. (a) a right-angled (b) an isosceles (c) an equilateral (d) a scalene	B
51	In $\triangle ABC$ if : $m(\angle B) = 60^\circ$ and $m(\angle C) = 50^\circ$, then the shortest side in triangle ABC is (a) \overline{AC} (b) \overline{BC} (c) \overline{BC} (d) \overline{AB}	D
52	In the triangle ABC , if $m(\angle B) = 90^\circ$, then the greatest side in length is (a) \overline{AB} (b) \overline{BC} (c) \overline{AC} (d) \overline{XY}	C
53	The triangle ABC is obtuse-angled triangle at B , then the longest side is (a) AB (b) BC (c) AC (d) AD	C
54	$\triangle XYZ$ is right-angled at Y , then XZ YZ (a) $=$ (b) $>$ (c) \leq (d) $<$	B

55	In ΔABC : $m(\angle B) + m(\angle C) = 3 m(\angle A)$, then $m(\angle A) = \dots\dots\dots^\circ$ (a) 30 (b) 60 (c) 45 (d) 90	C
56	The sum of lengths of any two sides in any triangle $\dots\dots\dots$ the length of the third side. (a) is less than (b) is greater than (c) equals (d) otherwise	B
57	If the lengths of two sides in an isosceles triangle are 2 cm. and 5 cm. , then the length of the third side is $\dots\dots\dots$ cm. (a) 2 (b) 3 (c) 5 (d) 7	C
58	ΔABC , $AB = 2$ cm. , $BC = 7$ cm. , then AC may equal $\dots\dots\dots$ (a) 2 cm. (b) 5 cm. (c) 9 cm. (d) 8 cm.	D
59	The lengths of two sides in a triangle are 4 cm. and 9 cm. and it has on axis of symmetry , then the length of third side is $\dots\dots\dots$ (a) 4 cm. (b) 5 cm. (c) 9 cm. (d) 13 cm.	C
60	In ΔABC if : $AB = 3$ cm. and $BC = 5$ cm. , then $AC \in \dots\dots\dots$ (a) $]3 , 8]$ (b) $[2 , 8]$ (c) $]2 , 8 [$ (d) $]2 , 5 [$	C
61	Which of the following can be sides to draw the triangle $\dots\dots\dots$ (a) 5 cm. , 6 cm. , 12 cm. (b) 5 cm. , 6 cm. , 11 cm. (c) 5 cm. , 6 cm. , 4 cm. (d) 4 cm. , 6 cm. , 10 cm.	C
62	How many different triangles can be formed with sides of lengths a whole number of cm. and each with perimeter 7 cm. ? (a) 1 (b) 2 (c) 3 (d) 4	B
63	If the length of one side of a triangle is 5 cm. , then which of the following could be the lengths of the other two sides ? (a) 2 cm. and 3 cm. (b) 7 cm. and 2 cm. (c) 2 cm. and 2 cm. (d) 4 cm. and 6 cm.	D
64	In the triangle ABC , $AC \dots\dots\dots (AB - BC)$ (a) $>$ (b) \geq (c) \leq (d) $<$	A

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

